DOCUMENT RESUME

ED 105 208 CE 003 497

TITLE	Ophthalmology Manpower: A General Profile: United States--1968. Vital and Health Statistics--Series 14, No. 5.
INSTITUTION	National Center for Health Statistics (DHEW), Rockville, Md.
REPORT NO	DHEW-HSM-73-1800
PUB DATE	Dec 72
NOTE	68p.
AVAILABLE FROM	Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402 ($1.25)
EDRS PRICE	MF-$0.76 HC-$3.32 PLUS POSTAGE
DESCRIPTORS	*Health Personnel; *Health Services; National Surveys; *Ophthalmology; Statistical Data; *Tables (Data)

ABSTRACT

The report on national resources in ophthalmology is the product of a national survey of ophthalmologists between May and December 1968. The survey was conducted by a self-administered questionnaire (a facsimile of which comprises an appendix) that was mailed to the approximately 10,300 ophthalmologists in the United States, of whom over 10,100 responded. The report, supported by 18 detailed tables which cover 28 pages, consists of: (1) a statistical overview of the total national resource in active and inactive ophthalmologists, (2) a statistical evaluation of active ophthalmologists in terms of: their geographical distribution and ratio to the general population; such selected characteristics as their age, sex, specialty board certification, and professional identity (doctor of medicine or of ophthalmology); the scope of their actual and potential activity as indicated by the number of States in which they hold licenses; the vocational context of their professional activity as revealed in their principal form of employment; the volume of their activity as determined from the number of weeks they worked per year and the number of hours they worked per week; finally, the nature of their professional activity as evidenced by the clinical and nonclinical functions in which they engaged. (JR)

ED105208

DATA ON HEALTH RESOURCES

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Series 14
Number 5

Ophthalmology Manpower

A General Profile

United States - 1968

Statistics are presented on selected demographic and professional characteristics of active and inactive ophthalmologists. The data were collected by the National Center for Health Statistics in cooperation with the U.S. Bureau of the Census from ophthalmologists in all 50 States and the District of Columbia. Ophthalmologists are statistically described in terms of general characteristics (ages, sex, geographic distribution, board certification, and whether doctors of medicine or of osteopathy); and by selected features of their professional activity, namely, number of States licensed in, principal type of employment, volume of activity, and clinical and nonclinical functions engaged in.

CE 003 497

DHEW Publication No. (HSM) 73-1800

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service

Health Services and Mental Health Administration
National Center for Health Statistics
Rockville, Md. December 1972

NATIONAL CENTER FOR HEALTH STATISTICS

THEODORE D. WOOLSEY, *Director*
EDWARD B. PERRIN, Ph.D., *Deputy Director*
PHILIP S. LAWRENCE, Sc.D., *Associate Director*
OSWALD K. SAGEN, Ph.D., *Assistant Director for Health Statistics Development*
WALT R. SIMMONS, M.A., *Assistant Director for Research and Scientific Development*
JOHN J. HANLON, M.D., *Medical Advisor*
JAMES E. KELLY, D.D.S., *Dental Advisor*
EDWARD E. MINTY, *Executive Officer*
ALICE HAYWOOD, *Information Officer*

DIVISION OF HEALTH RESOURCES STATISTICS

SIEGFRIED A. HOERMANN, *Director*
PETER L. HURLEY, *Deputy Director*
G. GLORIA HOLLIS, *Chief, Health Facilities Statistics Branch*
GRACE K. WHITE, *Chief, Hospital Discharge Survey Branch*
HENRY S. MOUNT, *Chief, Health Manpower Statistics Branch*
WILLIAM F. STEWART, *Chief, Family Planning Statistics Branch*

COOPERATION OF THE BUREAU OF THE CENSUS

Under the legislation establishing the National Health Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State, or private agencies.

In accordance with specifications established by the National Center for Health Statistics, the Bureau of the Census, under a contractual arrangement, participated in planning the survey and collecting the data.

Vital and Health Statistics-Series 14-No. 5

DHEW Publication No. (HSM) 73-1800
Library of Congress Card Number 75-190015

CONTENTS

	Page
Introduction	1
Background	1
Scope	1
Content	2
Major Characteristics of the Active Ophthalmologist	2
The Total Ophthalmologist Universe	2
The Active Ophthalmologist	3
Geographic Distribution and Ratio to Population	3
Selected Personal and Professional Characteristics	5
Areal Scope of Activity	8
Number of States Licensed In	8
Vocational Context of Activity	10
Principal Type of Employment	10
Volume of Activity	11
Weeks Worked Per Year and Hours Worked Per Week	11
Nature of Activity	13
Clinical and Nonclinical Activities Engaged In	13
Selected Findings Among Active Ophthalmologists	17
References	18
List of Detailed Tables	19
Appendix I. Technical Notes and Qualifying Comments	49
Data Collection	49
Processing of Data	49
Adjustments	50
Qualifying Comments	51
Appendix II. Definitions of Certain Terms Used in This Report	53
Appendix III. Survey Questionnaires	54
Questionnaire for Doctors of Medicine	54
Questionnaire for Doctors of Osteopathy	58

SYMBOLS	
Data not available	---
Category not applicable	...
Quantity zero	-
Quantity more than 0 but less than 0.5	0.0
Figure does not meet standards of reliability or precision	*
Data suppressed to comply with confidentiality requirements	#

OPHTHALMOLOGY MANPOWER
A GENERAL PROFILE

Hugo K. Koch, M.H.A., *Division of Health Resources Statistics*

INTRODUCTION

Background

This is a report on the national resource in ophthalmologists as it existed in the United States in 1968. Statistics reported here are chiefly the product of one of three surveys on vision manpower conducted by the National Center for Health Statistics between May 1968 and June 1969. These surveys sought information on four groups—ophthalmologists, optometrists, opticianry establishments, and dispensing opticians. The long-range goal of the surveys was to provide statistical information for use in planning for educational programs, manpower requirements, research projects, and delivery of eye-care services.

Scope

Reported here are statistics on an estimated 9,056 ophthalmologists, 8,616 of whom were active in their profession at the time of the 1968 survey. These totals reflect the application of a statistical adjustment designed to compensate for various types of nonresponse to the survey and are felt to represent a good approximation of the actual manpower resource in ophthalmologists in 1968.

Included within the population of active ophthalmologists are 8,434 doctors of medicine (M.D. ophthalmologists) who had reported to the American Medical Association (AMA) that ophthalmology was their primary or secondary specialty and 181 doctors of osteopathy (D.O. ophthalmologists) who had reported to the American Osteopathic Association that they devoted any time whatever to ophthalmological activities.

Excluded from the scope of this report are 233 "uniformed" ophthalmologists (that is, ophthalmologists who were active in the Army, Navy, Air Force, and Commissioned Corps of the Public Health Service at the time of the survey), and 879 students of ophthalmology who were enrolled in civilian and military residency programs at the time of the survey. The chief interest of this report is in the formally qualified civilian ophthalmologist.

In scope and content this report differs substantially from other sources of information on ophthalmological manpower. The reader should generally avoid a direct comparison of these data with data from other sources, especially with data from AMA directories for the period or with publications based on AMA data.[1-3] This caution in comparison is indicated for the following reasons. The universe reported on here comprehends D.O. ophthalmologists as well as M.D. ophthalmologists and includes practitioners who worked part time as well as those who worked full time in ophthalmological activities. Furthermore, the population reported on is non-Federal only to the extent that it excludes uniformed ophthalmolgists; otherwise it includes Federal employees. Also excluded are residents and interns. Therefore, unless suitable adjustments are made, only rough comparisons to the cited data sources can generally be made.

Content

This general profile of the ophthalmologist is the first of three reports planned in the area of ophthalmological manpower. The subsequent reports, based chiefly on the same survey data, will focus in turn on characteristics of the clinical practice of ophthalmology and on the utilization of supplementary personnel by the ophthalmologist.

The report is composed of the following parts, given in the sequence in which they are discussed.

1. A statistical overview of the total national resource in active and inactive ophthalmologists—tables 1-2.
2. A statistical evaluation of active ophthalmologists in terms of:

- Their geographic distribution and ratio to the general population—tables 1,2,3,4,7,8,10, and 12.
- Such selected characteristics as their age, sex, specialty board certification, and professional identity (doctor of medicine or of osteopathy)—tables 4-6.
- The areal scope of their actual and potential activity as indicated by the number of States in which they hold active licenses—tables 5,7, and 9.
- The vocational context of their professional activity as revealed in their principal form of employment—tables 5,8,9,11,13, and 14.
- The volume of their activity as determined from the number of weeks they worked per year and the number of hours they worked per week—tables 6,9-11, and 13-18.
- Finally, the nature of their professional activity as evidenced by the clinical and nonclinical functions in which they engaged—tables 12-18.

The various compensatory adjustments used in establishing the report data along with other methodological considerations are discussed in appendix I. Definitions of terms used in the report appear in appendix II. Finally, the reader may refer to appendix III for copies of the actual survey questionnaires used to elicit information from M.D. and D.O. respondents.

Major Characteristics of the Active Ophthalmologist

A brief overview of the major characteristics of the 8,616 active ophthalmologists who are the chief subjects of this report reveals that:

- About 98 percent were doctors of medicine.
- About 97 percent were male.
- About 95 percent were self-employed.
- About 97 percent reported some activity in the practice of clinical ophthalmology (direct diagnosis and treatment of eye patients).
- About 68 percent were active in solo practice.
- About 26 percent were engaged in some type of multiple-physician practice.
- About 33 percent spent some time in teaching.
- About 11 percent spent some time in medical research.
- Finally, there was a tendency in most regions and in most forms of employment to work at maximum volume (that is, in excess of 48 weeks per year and 48 hours per week).

THE TOTAL OPHTHALMOLOGIST UNIVERSE

Survey findings support an estimate of 9,056 for the total number of ophthalmologists—active and inactive—in the United States in 1968. Of these, 8,616, or 95.1 percent, reported that they were active in their profession either in a full-time or part-time capacity. The survey questionnaires did not define the terms "full-time" and "part-time," leaving their interpretation to the subjective judgment of the respondents, 89.2 percent of whom reported full-time activity. (See "Qualifying Comments" in appendix I.)

A total of 440 ophthalmologists, or 4.9 percent of all survey respondents reported that they were inactive in their profession, 311 by reason of retirement and 129 for other reasons. No effort was made to elicit the specific reasons for the inactivity of those ophthalmologists who reported being inactive in their profession although not retired.

Data in table A reveal the age characteristics of inactive ophthalmologists. About 49 percent of the inactive but not retired group were under 65 years of age, while only about 17 percent of the retired group were in that younger category. Data in table B reveal the distribution of ophthalmologists by geographic region. Except for a slightly disproportionate concentration of retired ophthalmologists in the North Central Region, the distribution agrees with regional proportions for active ophthalmologists.

THE ACTIVE OPHTHALMOLOGIST

Geographic Distribution and Ratio to Population

The number of ophthalmologists active in their profession at the time of the survey was approximately 8,616. Data in figure 1 reveal their distribution by geographic region and division. Table C shows the number of active ophthalmologists per 100,000 population in geographic regions and divisions and the census estimates for July 1, 1968, while table D uses the same census estimates to show the ratio of the ophthalmologists to the population by State.

From the findings of this survey, the national ratio of active ophthalmologists to population in 1968 was estimated to be 4.4 ophthalmologists per 100,000 population. The reader is reminded that this population of active ophthalmologists included not only those M.D. opthalmologists who reported ophthalmology as their primary specialty but also doctors of medicine who reported ophthalmology as their secondary specialty, as well as doctors of osteopathy who reported that they had spent time in ophthalmological activities.

Four of the nine geographic divisions exceeded the national ratio—New England, Middle Atlantic, Mountain, and Pacific Divisions. The five States exhibiting the highest ratios were, in order of descending magnitude, the District of Columbia, Colorado, Montana, California, and New York. The five States exhibiting the lowest ratios were South Carolina, Mississippi, Alabama, Alaska, and Arkansas.

The South Region, although it has a larger civilian population than the other regions, is relatively poorest in ophthalmologists—3.7 per 100,000 population. When the District of Columbia with its disproportionately high ratio of 10.3 is excluded from the calculations for the South Atlantic Division, the southern ratio is even more sharply reduced to 3.1.

Table A. Number and percent distribution of inactive ophthalmologists by age: United States, 1968

Age	Inactive but not retired	Retired
	Number	
All ages----	129	311
	Percent distribution	
All ages----	100.0	100.0
Under 35 years----	11.6	0.3
35-44 years-------	10.9	-
45-54 years-------	8.5	2.6
55-64 years-------	17.8	14.5
65 years and over-	51.2	82.6

Comparing the numeric growth in active ophthalmologists to the growth of the population, a slow but continuous increase in numbers of ophthalmologists per 100,000 population may be observed from 1950 to the time of this survey. This becomes evident when the findings of this survey for 1968 are added to the historical perspective established in a recent study[3] as follows:

	Ophthalmologists per 100,000 population
1950 ----------	2.2
1960 ----------	3.0
1961 ----------	3.2
1962 ----------	3.3
1963 ----------	3.5
1964 ----------	3.6
1965 ----------	3.6
1966 ----------	3.6
1967 ----------	3.7
1968 ----------	3.8

Table B. Number and percent distribution of active and inactive ophthalmologists by geographic region: United States, 1968

Geographic region	Activity status		
	Active	Inactive but not retired	Retired
	Numbers		
United States	8,616	129	311
Northeast	2,458	39	86
North Central	2,117	28	95
South	2,258	40	79
West	1,782	22	50
	Percent distribution		
United States	100.0	100.0	100.0
Northeast	28.5	30.2	27.7
North Central	24.6	21.8	30.6
South	26.2	31.0	25.5
West	20.7	17.0	16.1

(See also figure 2.) In the cited study an ophthalmologist is defined as any M.D. physician in practice who declared ophthalmology as a "full-time or primary specialty." Using this criterion, in 1950 there were 2.2 ophthalmologists per 100,000 population (adjusted to include an estimate for eye, ear, nose, and throat (EENT) specialists who saw themselves more as ophthalmologists than otolaryngologists). In 1967 there were 3.7 ophthalmologists per 100,000. In 1950 there was one ophthalmologist for every 50,000 persons and 17 years later one for every 25,000.

The ratio for 1968 derived from the findings of this survey (4.4 ophthalmologists per 100,000 population) is not directly comparable to the ratios of the cited study since it does not limit itself to M.D. ophthalmologists reporting a primary specialty in ophthalmology. Rather, it has been extended to include 181 osteopathic ophthalmologists as well as approximately 903 M.D. ophthalmologists who reported ophthalmology as a secondary specialty. When, however, the more comprehensive figure of 4.4 per 100,000 is adjusted downward to exclude these 1,084 practitioners, a ratio of 3.8 ophthalmologists per 100,000 is obtained, a figure which is directly comparable to the ratios in the cited study and which appears as the value for the 1968 ratio offered in figure 2. (See methodological discussion in appendix I.)

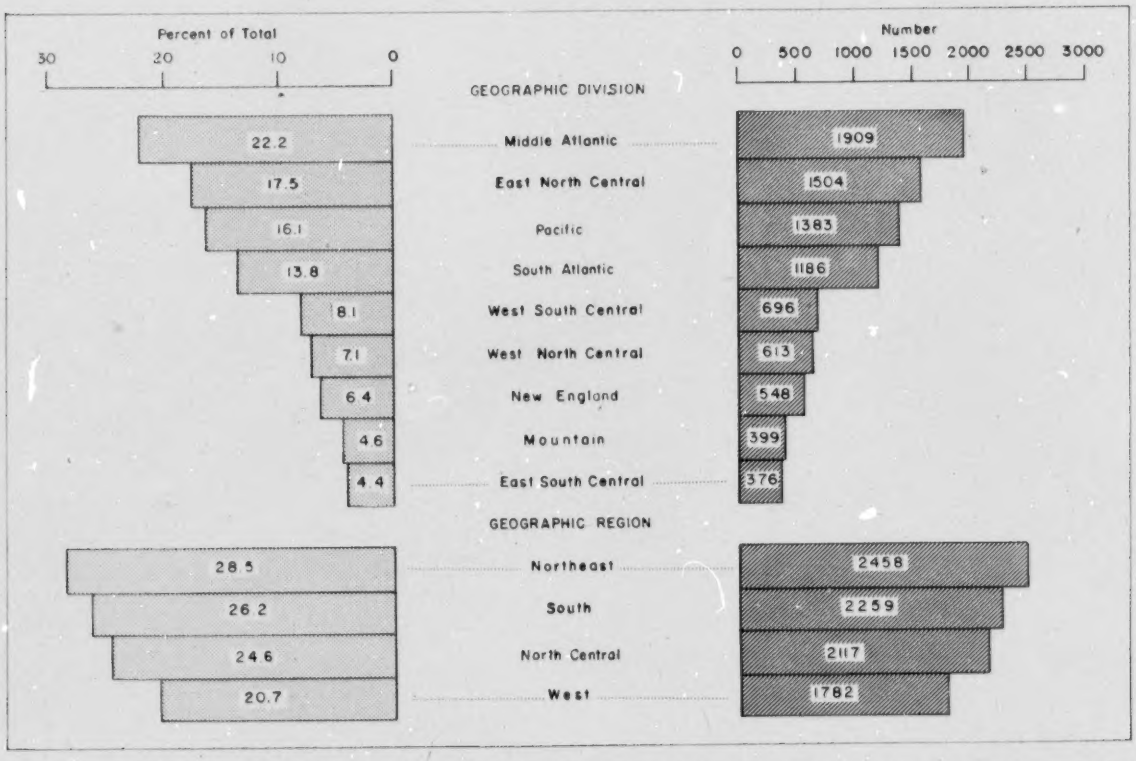

Figure 1. Number and percent distribution of active ophthalmologists by geographic region and division: United States, 1968.

Selected Personal and Professional Characteristics

Figure 3 tabulates the numbers and percent distribution of active ophthalmologists by 10-year age intervals. The national median age was 51.4 years. Majority concentrations of ophthalmologists are seen to lie in the intervals directly above and below the median interval of 45-54 years, a bimodal tendency that may partly reflect the intervention of World War II with its attendant effects on formal training and licensure.

No respondents were reported as less than 25 years old and only about 9 percent fell in the age group 25-34 years. About 3.6 percent were still active in their profession after the age of 75 years.

The Northeast Region exhibited a relatively greater proportion of ophthalmologists in the older age group 55-74 years than the other regions. The West was highest in the proportion of active ophthalmologists in the younger age group 35-54 years. Survey findings offer no directly cogent reasons for these age effects.

In median age, the ophthalmologist tended to be at least 2 years older than the typical member of the active and formally qualified M.D. population. Whereas about 25 percent of the overall M.D. population clustered in the age group under 34 years, only about 9 percent of ophthalmologists surveyed fell in this younger category.[2]

The reason for this disparity probably lies chiefly in the fact that the ophthalmologist population included 1,584 members who still engaged part time in the practice of otolaryngology. As a group, this residual from earlier days when EENT was a unified specialty were most often found in the age group over 60 years, an effect which tended to elevate the overall age average for all survey respondents.

Table C. Number of active ophthalmologists per 100,000 population, by geographic region and division: United States, 1968

Geographic location	Population in thousands[1]	Number of active ophthalmologists	Active ophthalmologists per 100,000 population
United States	197,560	8,616	4.4
Northeast Region	48,193	2,458	5.1
New England	11,322	[illegible]	4.8
Middle Atlantic	36,871	1,909	5.2
North Central Region	55,369	2,117	3.8
East North Central	39,403	1,504	3.8
West North Central	15,965	613	3.8
South Region	61,227	2,259	3.7
South Atlantic	29,381	1,186	4.0
East South Central	12,893	376	2.9
West South Central	18,953	696	3.7
West Region	32,771	1,782	5.4
Mountain	7,800	399	5.1
Pacific	24,972	1,383	5.5

[1]Census estimates for July 1, 1968, from U.S. Bureau of the Census, "Population Estimates," Current Population Reports, Series P-25, No. 436, January 7,1970.

About 97 percent of active ophthalmologists were male. Males reported a median age of 51.4 years, females a slightly lower median age of 50.1 years. Larger proportions of females than males were clustered in the age intervals 35-44 and 45-54.

The proportion of female ophthalmologists in the active survey universe (about 3 percent) is lower than the national proportion of female physicians (about 7 percent) reported by AMA as of December 31, 1967, for all active and formally qualified M.D. physicians.[2]

Geographically, female ophthalmologists were distributed in roughly the same proportions as their male counterparts. As with the males, the largest concentrations were in California and New York. A disproportionately large female representation occurred in Illinois, where this survey revealed a cluster of 31—about 13 percent—of all female ophthalmologists but only 5

Table D. Number of active ophthalmologists per 100,000 population, by State: United States, 1968

State	Ophthalmologists per 100,000 population[1]	State	Ophthalmologists per 100,000 population[1]
	Same as U.S. ratio (4.4) or above		Below U.S. ratio (4.4)—Con.
Arizona	4.9	Hawaii	4.2
California	5.7	Illinois	3.9
Colorado	6.1	Indiana	3.5
Connecticut	5.2	Iowa	3.7
District of Columbia	10.3	Kansas	3.4
Florida	4.9	Kentucky	3.0
Idaho	4.8	Louisiana	4.2
Maryland	4.5	Maine	4.0
Massachusetts	5.2	Michigan	3.9
Montana	5.7	Minnesota	4.0
New Jersey	4.4	Mississippi	2.7
New Mexico	4.6	Missouri	4.2
New York	5.6	Nebraska	3.8
Oregon	5.5	Nevada	3.6
Pennsylvania	5.0	New Hampshire	3.9
Utah	4.6	North Carolina	3.5
Vermont	4.4	North Dakota	3.3
Washington	5.0	Ohio	3.7
Wyoming	5.0	Oklahoma	3.9
		Rhode Island	3.6
	Below U.S. ratio (4.4)	South Carolina	2.8
		South Dakota	3.3
		Tennessee	3.3
Alabama	2.5	Texas	3.7
Alaska	2.1	Virginia	3.7
Arkansas	2.1	West Virginia	3.5
Delaware	4.0	Wisconsin	4.0
Georgia	3.2		

[1]Based on census estimates for July 1, 1968, from U.S. Bureau of the Census, "Population Estimates," Current Population Reports, Series P-25, No. 436 Jan. 7, 1970.

percent of total respondents, male and female. Survey findings offer no explanation for this concentration.

All osteopathic ophthalmologists responding were males. In terms of professional identity (i.e., doctor of medicine or doctor of osteopathy) about 98 percent of active ophthalmologists were doctors of medicine.

Geographically, D.O. opthalmologists showed a stronger tendency to favor the North Central Region than their M.D. counterparts. Fifty-four percent of their number reported this region to be their area of primary activity as opposed to about 24 percent of M.D. respondents. The States of Michigan, Missouri, and Ohio were especially favored by D.O. opthalmologists, with

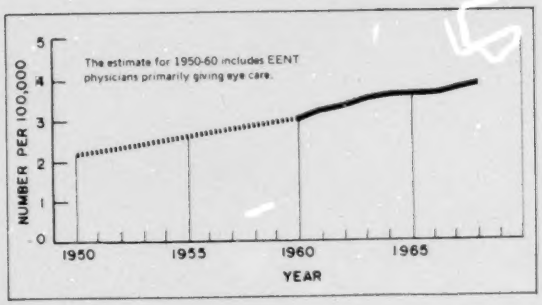

Figure 2. Number of ophthalmologists per 100,000 population: United States, 1950-68.

Source: Data for 1950-67 from article cited in reference 3.

7

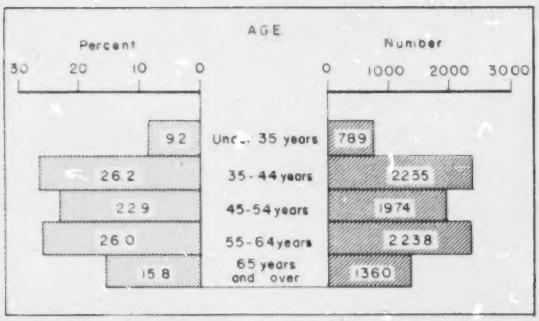

Figure 3. Number and percent distribution of active ophthalmologists by age: United States, 1968.

14.4 percent, 18.8 percent, and 12.2 percent of total osteopaths, respectively.

Information on specialty board certification of M.D. ophthalmologists was obtained from AMA. Of the 8,434 active M.D. ophthalmologists, 4,952, or about 59 percent, were board certified, the majority with the American Board of Ophthalmology, a minority with the American Board of Otolaryngology. The national figure reported by AMA for all board certified physicians as of December 31, 1967, was 31.4 percent.[2] (See "Qualifying Comment" in appendix I.)

AREAL SCOPE OF ACTIVITY

Number of States Licensed In

In order to approximate the geographic latitude of the ophthalmologist's activity, respondents were asked to list the States in which they currently held an active license to practice. Statistics presented here tabulate only the *number* of States in which the respondent reported active licensure; no report is attempted on the geographic contiguity of the States involved when a respondent reported licensure in more than one State.

Of 8,616 active ophthalmologists (M.D. and D.O.) 4,901, or about 57 percent, held an active license in only one State. Slightly over 27 percent held an active license in two States and nearly 12 percent held an active license in three States. Only 402, or about 5 percent, were licensed in four or more States. About 65 percent of D.O. respondents reported licensure in more than one State as opposed to about 43 percent of their M.D. counterparts.

Figure 4 offers a graphic representation of this areal scope of licensure according to the geographic division in which the M.D. or D.O. ophthalmologist was active. Noteworthy is the fact that 65 percent of the M.D. ophthalmologists active in the Mountain Division were licensed in more than one State. This proportion is higher than comparable proportions for the other eight divisions and may partly reflect the fact that in this area a relatively small percentage of the Nation's ophthalmologists (4.6 percent) must attempt to cover a population which is more widely dispersed geographically than the population of the other divisions.

Information on the type of license held by D.O. ophthalmologists was supplied by the American Osteopathic Association. According to the publication *State Licensing of Health Occupations*[4] 41 States and the District of Columbia granted unlimited practice rights to doctors of osteopathy. Nine States issued limited licenses to doctors of osteopathy which placed restrictions on their right to use drugs or perform surgery.

According to the American Osteopathic Association, the osteopathic ophthalmologists included in the survey held at least one license in a State which granted unlimited practice rights to osteopaths. Fourteen of the osteopathic respondents held at least one license in a State which restricted practice activities.

Areal scope of licensure showed a pronounced relationship to the age of the respondent, varying inversely with increasing age. This inverse relationship is shown in figure 5. Two factors probably account for it. One, the younger ophthalmologist has more energy to expend than his elder colleague, and, two, the younger practitioner does not have the economic security enjoyed by his older colleague and may thus extend the areal scope of his activity in order to achieve this security.

It was of interest to explore whether practice in multiple-physician arrangements carried with it a tendency toward extended areal scope of licensure. Figure 6 reveals the percentages of

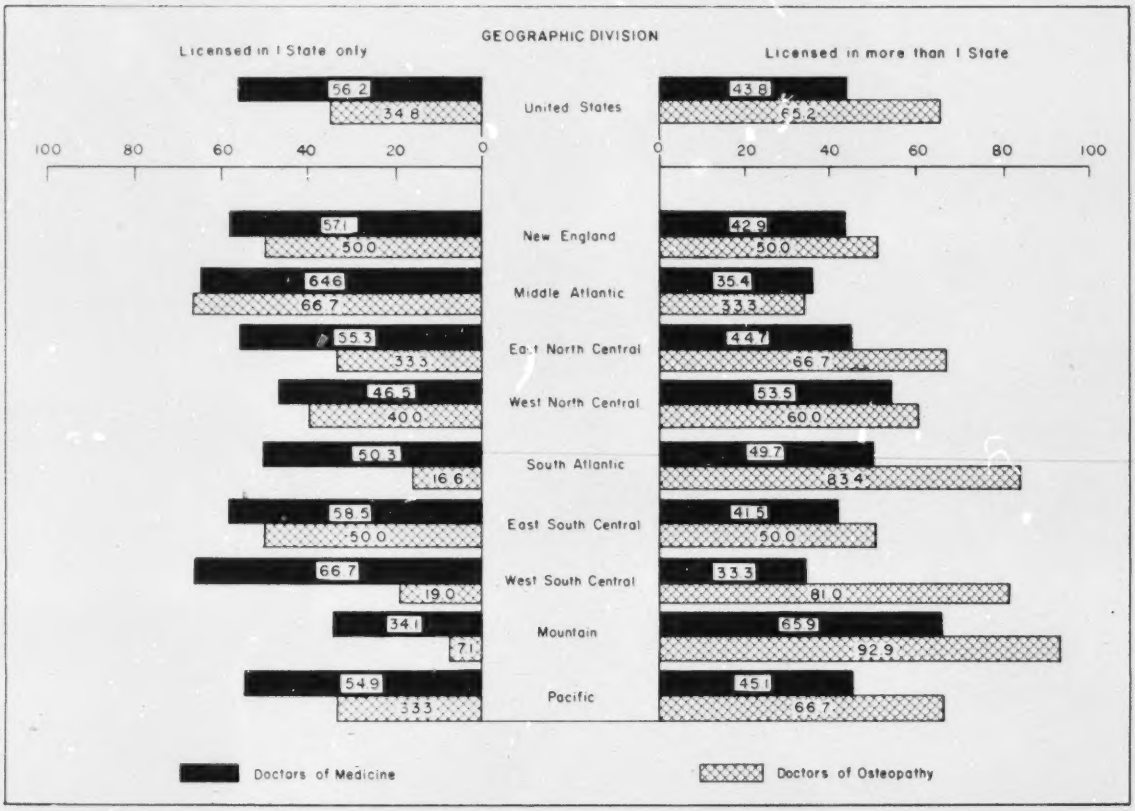

Figure 4. Distribution of M.D. and D.O. ophthalmologists by number of States licensed in, according to geographic division: United States, 1968.

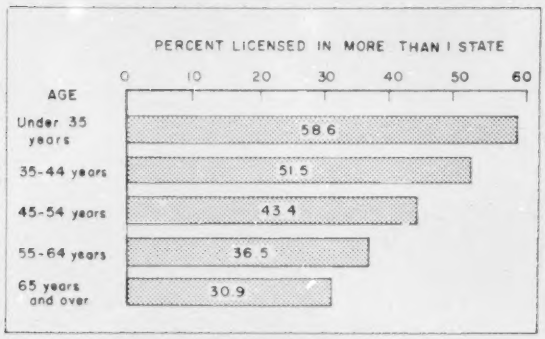

Figure 5. Percent of ophthalmologists licensed in more than one State by age: United States, 1968.

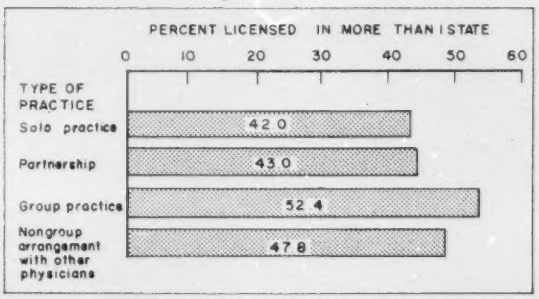

Figure 6. Percent of ophthalmologists licensed in more than one State by type of practice: United States, 1968.

ophthalmologists licensed in two or more States according to the type of practice. It can be seen that practitioners in multiple-physician arrangements showed a greater tendency toward plural licensure than did solo practitioners. The difference between the licensure status of solo practitioners and those engaged in partnership practice is too small to be of importance, but the number of practitioners in group practice who report plural licensure is sufficiently above the number of plurally licensed solo practitioners to warrant a more extended investigation.

VOCATIONAL CONTEXT OF ACTIVITY

Principal Type of Employment

One section of the survey questionnaire was designed to investigate the ophthalmologist's principal type of employment.

The data in table E show the number and percent distribution of active ophthalmologists by their principal type of employment. It is noteworthy that by far the largest proportion of active ophthalmologists were self-employed and engaged in solo practice and that, of the various forms of multiple arrangements, the partnership was favored over such other plural-physician forms as group practice and various nongroup arrangements with other physicians.

Geographically, the Northeast Region had the highest percentage of self-employed ophthalmologists engaged in solo practice—79.1 percent—and, conversely, the lowest proportion engaged in plural-physician arrangements—14.8 percent. The North Central and West Regions, with about 31 percent each, had the highest percentage of ophthalmologists engaged in plural-physician practice.

For the Northeast and West Regions at least, these practice preferences may be partly explained by the effect of age. It will be remembered that ophthalmologists in the Northeast Region were relatively older and those in the West Region relatively younger than their colleagues in the other regions. As may be seen in the discussion that follows shortly, a definite relationship seems to exist between age and type of practice.

Of two minority groups in the ophthalmologist universe—females and doctors of osteopathy—females showed a slightly greater preference for plural-physician practice than males. Osteopathic physicians, on the other hand, showed a distinctive preference for solo practice; about 79 percent of D.O. ophthalmologists were in solo practice as opposed to about 68 percent of their M.D. colleagues.

Figure 7 pictures the relationship between principal type of employment and the age of the ophthalmologist. It is noteworthy that participation in plural-physician practice varied inversely with the age of the participant; the proportions were about 40 percent in plural-physician prac-

Table E. Number and percent distribution of active ophthalmologists by principal type of employment: United States, 1968

Principal type of employment	Number	Percent distribution
All types	8,616	100.0
Self-employed	8,157	94.6
Solo practice	5,902	68.5
Partnership	1,407	16.3
Group practice	487	5.7
Nongroup arrangement with other physicians	361	4.2
Salaried	459	5.3
Hospital[1]	171	2.0
Nonhospital[2]	288	3.3

[1]Includes nongovernment hospitals and city, county, State, and Federal government hospitals.

[2]Includes medical schools; city, county, State, and Federal government agencies; and all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, etc.

tice for ophthalmologists under 35, and only about 16 percent for those over 65 years of age. This tendency may partly reflect the fact that the forms of plural-physician practice are relatively recent in their application and are therefore more likely to be favored by the younger practitioner.

As also indicated by figure 7, salaried employment was notably more common in the age group under 35 years, a fact which may be partly due to the extension of hospital employment into the immediate postresidency period.

Geographically, respondents in the Middle Atlantic, West North Central, and South Atlantic Divisions were the most disposed to salaried employment with proportions of 5.9 percent, 6.3 percent, and 7.4 percent, respectively, as opposed to the national average of 5.3 percent. The lowest proportion of salaried ophthalmologists—2.8 percent—was reported for respondents active in the Mountain Division. Possibly because of the number of ophthalmologists employed by Federal installations in or near the Nation's capitol, the District of Columbia with 22.2 percent and Maryland with 12.1 percent were highest among all the States in their proportions of salaried ophthalmologists.

Data in table F reveal the distribution of salaried ophthalmologists by the two major categories of salaried employment which, for analytical purposes, were identified as hospital employees and nonhospital employees. The several categories under other nonhospital employment have not been tabulated separately since they were infrequently reported.

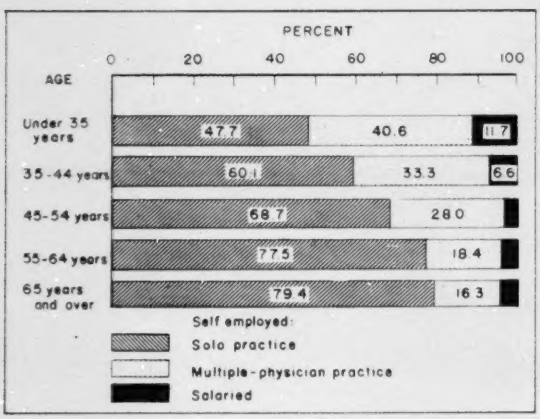

Figure 7. Percent distribution of active ophthalmologists, by age and principal type of employment: United States, 1968.

Table F. Number and percent distribution of salaried ophthamologists by type of salaried employment: United States, 1968

Type of salaried employment	Number	Percent distribution
All types----	459	100.0
Hospital-------	171	37.3
Nongovernment hospitals---------	55	12.0
City or county government hospitals---------	21	4.6
State government hospitals---------	28	6.1
Federal Government hospitals---------	67	14.6
Nonhospital----	288	62.7
Medical school-----	222	48.4
City or county government--------	17	3.7
State government	12	2.6
Federal Government-	18	3.9
Other[1]----------	19	4.1

[1]Includes all types of insurance carriers, pharmaceutical companies, corporations voluntary organizations, medical societies, associations, etc.

VOLUME OF ACTIVITY

Weeks Worked Per Year and Hours Worked Per Week

Of several indicators of the volume of professional activity yielded by the survey findings, only one will be statistically explored at this

time, namely, the amount of time that the ophthalmologist spent in all his professional activities—clinical and nonclinical—as measured by the weeks he "usually" worked per year and the hours he "usually" worked per week. ("Usually" is the wording used in the survey questionnaires.)

Figure 8 offers a representation of the national distribution of active ophthalmologists by this index of volume of activity. The categories "48-52 weeks per year" and "49 hours or more per week" are arbitrarily designated as the "maximum volume of activity" in the textual commentary that follows.

As the data in figure 8 reveal, the largest proportion of active ophthalmologists—38.8 percent—reported working at the maximum volume of activity. This tendency toward longer working periods also appeared regionally throughout the country. It was most pronounced in the South Region, where 45 percent of the respondents reported working at the maximum volume of activity.

Since the South Region also showed the lowest ratio of ophthalmologists to population (3.7 per 100,000), it was of interest to explore statistically the possible relationship between increased time spent in ophthalmological activities and the numbers of ophthalmologists available to do the work. This relationship is shown by geographic division in the table on page 13. Of the five divisions which fell below the national ratio of 4.4 ophthalmologists per 100,000 population, four are seen to exceed the national average of 38.8 percent for ophthalmologists working at the maximum volume of activity. Of the four divisions which exceeded the national ratio of ophthalmologists to population, only one is seen to exceed the national average for respondents working at the maximum volume of activity. A positive relationship therefore seems indicated.

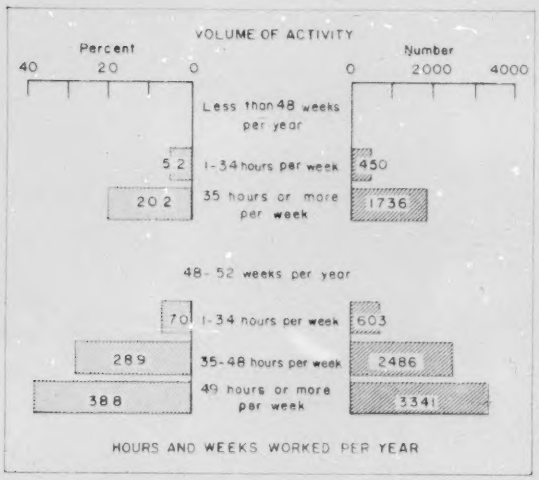

Figure 8. Distribution of active ophthalmologists by weeks worked per year and hours worked per week: United States, 1968.

The same tendency toward maximal work effort observed nationally and regionally is also apparent throughout the principal types of employment in which ophthalmologists reported themselves engaged. This may be seen in table G. The largest percentage of ophthalmologists in every employment category reported a volume of activity level in excess of 48 weeks per year and 48 hours per week.

When certain personal characteristics such as sex and age are considered, females reported a more subdued volume of activity than did male ophthalmologists. Of the female respondents, the highest proportion—about 29 percent of the total for their sex—reported an activity level of over 48 weeks per year and between 35 and 48 hours per week, which, although relatively high, was lower than the maximum level. Male ophthalmologists, on the other hand, were more strongly represented in the maximum volume of activity category, where 39 percent of their numbers are found, as opposed to 19 percent of the female ophthalmologists.

Finally, a definite relationship was observed to exist between the age of the ophthalmologist and his tendency to work at the maximum volume of activity. This relationship is evident in figure 9, where the tendency toward maximum volume of activity, greatest at ages under 35 years, declines in an inverse proportion to the age of respondents in the advancing age categories.

Geographic division	Ophthalmologists per 100,000 population	Percentage of ophthalmologists working at maximum volume of activity[1]
United States	4.4	38.8
Ratio of ophthalmologists to population under the national ratio of 4.4/100,000		
East North Central	3.8	36.4
West North Central	3.8	41.1
South Atlantic	4.0	44.7
East South Central	2.9	41.8
West South Central	3.7	47.1
Ratio of ophthalmologists to population over the national ratio of 4.4/100,000		
New England	4.8	41.8
Middle Atlantic	5.2	33.0
Mountain	5.1	38.6
Pacific	5.5	37.0

[1]I.e., 48-52 weeks per year and 49 hours or more per week.

NATURE OF ACTIVITY

Clinical and Nonclinical Activities Engaged In

To complete this general profile of the ophthalmologist active in his profession in the United States in 1968, one final dimension must be statistically evaluated, namely, the nature of the professional activities to which the ophthalmologist devoted all or part of his time.

Survey respondents were asked to define the degree of their participation in various clinical and nonclinical activities by reporting the percent of time per week that they spent in each of seven selected activities. The clinical activities reported were clinical ophthalmology (direct ophthalmological diagnosis and treatment of eye patients), clinical otolaryngology, and other (unspecified) clinical, medical activity. The nonclinical activities reported were teaching, medical research, administration, and other nonclinical activities. (Note qualifying discussion in appendix I.)

Except to note that about 5 percent of all respondents reported participation in miscellaneous nonclinical activities not specifically identified with teaching, research, or administration, no more detail will be supplied on this "other" nonclinical category. Statistical information appearing here is limited to the nonclinical activities of teaching, medical research, and administration and to the three clinical activities already mentioned.

Figures 10 and 11 offer evidence of the degree of participation in certain clinical and nonclinical activities. As may be seen in figure 10, by far the largest proportion of active ophthalmologists—96.7 percent—reported spending some or all of their working week in clinical ophthalmology. Figure 11 reveals that the median

Table G. Percent distribution of active ophthalmologists by volume of activity according to principal type of employment: United States, 1968

Principal type of employment	Total	Volume of activity				
		Worked less than 48 weeks per year		Worked 48-52 weeks per year		
		1-34 hours per week	35 hours or more per week	1-34 hours per week	35-48 hours per week	49 hours or more per week
All types	100.0	5.2	20.1	7.0	28.9	38.8
Self-employed						
Solo practice	100.0	6.2	19.4	8.3	29.3	36.8
Partnership	100.0	2.8	25.2	3.5	27.8	40.8
Group practice	100.0	3.3	24.2	2.7	25.3	44.8
Nongroup arrangement with other physician(s)	100.0	3.3	18.0	5.8	29.4	43.5
Salaried						
Hospital[1]	100.0	2.3	10.5	5.3	40.4	41.5
Nonhospital[2]	100.0	5.2	11.5	5.9	24.3	51.4

[1]Includes nongovernment hospitals and City, County, State, and Federal Government hospitals.

[2]Includes medical schools; City, County, State, and Federal Government agencies; and all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, etc.

number of respondents active in clinical ophthalmology devoted about 83 percent of their working week to this activity. In spite of the growing separation between the specialties of ophthalmology and otolaryngology, a substantial number of respondents—1,583, or 18.4 percent of all respondents—still engaged in the practice of clinical otolaryngology. However, the median number of respondents active in clinical otolaryngology devoted only about 46 percent of their working week to this activity, a more subdued volume of activity than the proportion of the working week that the average clinical ophthalmologist devoted to his specialty.

Participation in the nonclinical activities of teaching, research, and administration was sub-

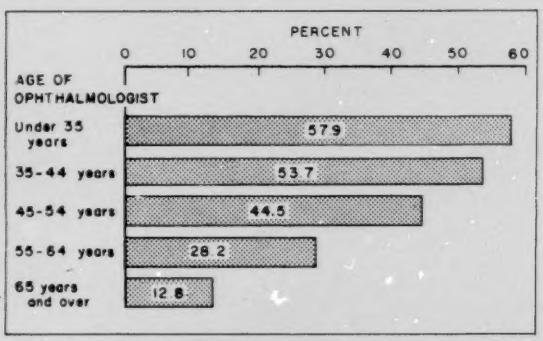

Figure 9. Percent of ophthalmologists working at maximum volume of activity, according to age: United States, 1968.

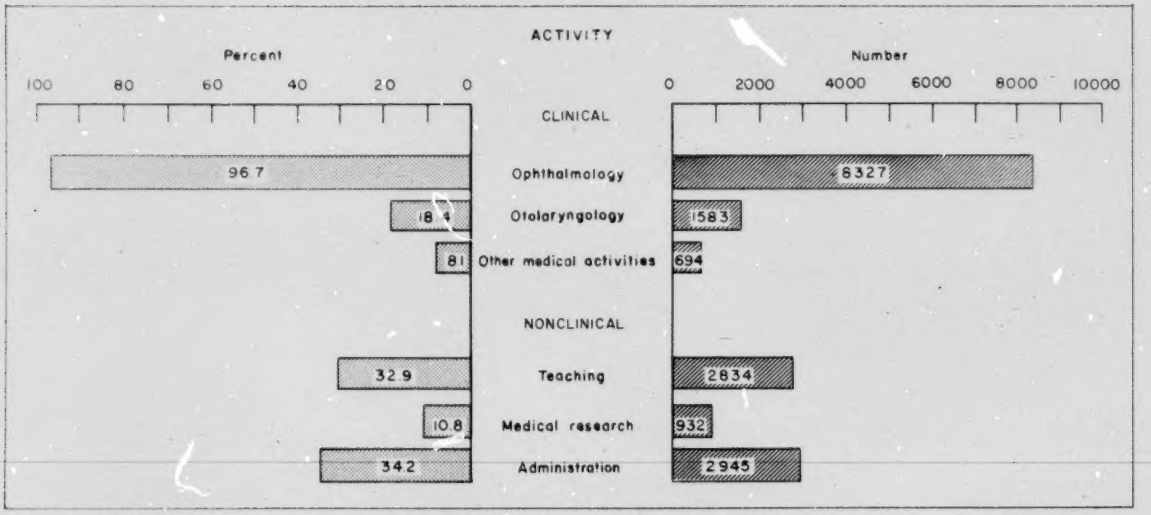

Figure 10. Number and percent of active ophthalmologists participating in selected clinical and nonclinical activities: United States, 1968.

stantially manifested by respondents, although generally at a much reduced level of participation—less than 20 percent of the working week.

Viewed regionally, the Northeast Region showed the richest involvement in all the clinical and nonclinical activities reported except clinical otolaryngology; in this activity, respondents in the South and North Central Regions were dominant.

The data in table H reflect the relationships between certain personal and professional characteristics and the selected activities engaged in.

It is notable that the median age level is substantially elevated for respondents who devoted some of their working effort to clinical otolaryngology, an effect which may be partly explained by the fact that the older respondent gained his training and experience in the days when EENT was a unified specialty and still tends to spend part of his clinical effort on disorders of the ear, nose, and throat. Also noteworthy is the fact that most of those respondents who devoted some part of their working week to nonclinical activities tended to cluster at the younger end of the age spectrum. It is perhaps partly owing to this relative youthfulness that participants in teaching and medical research also tended to work at maximum volume of activity (over 48 weeks per year and 48 hours per week). About 53 percent

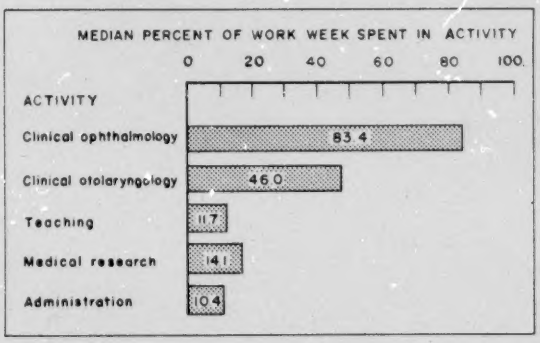

Figure 11. Distribution of ophthalmologists by degree of participating reported in selected clinical and nonclinical activities: United States, 1968.

of the respondents active in teaching and about 58 percent of those active in medical research reported working at the maximum volume of activity, as compared to the national average of 38.8 percent for all ophthalmologists who reported working at the maximum level.

It is evident from the data in table H that female ophthalmologists engaged in the selected clinical and nonclinical activities in roughly the same proportions as their male counterparts, except that substantially fewer females reported

administrative activity and involvement in clinical otolaryngology. Also noteworthy is the fact that osteopathic respondents showed less involvement in nonclinical activities than did their M.D. colleagues and a much stronger preference for certain clinical activities, namely clinical otolaryngology and other clinical medical activities.

Table J explores one final parameter of the ophthalmologist's professional activity by presenting data on the vocational framework in which he practiced his clinical and nonclinical activities. The table reveals the expected finding that most of the clinical activity reported was accomplished by self-employed ophthalmologists engaged in solo or multiple-physician practice and the finding—also predictable—that salaried ophthalmologists do most of their teaching and research in medical schools. It could not be as readily predicted prior to the survey, however, that self-employed, solo practitioners would account not only for the largest proportion of the clinical activity reported in this survey but also for the largest proportion of the nonclinical functions of teaching, research, and administration.

Table H. Percent distribution of active ophthalmologists engaged in selected activities by median age, sex, and professional identity: United States, 1968

Activity	Median age in years	Sex		Professional identity	
		Male	Female	M.D.	D.O.
Clinical					
Ophthalmology	50.4	96.7	94.4	96.0	89.0
Otolaryngology	60.4	18.7	7.7	17.4	62.4
Medical activity	53.3	8.0	9.4	7.6	27.6
Nonclinical					
Teaching	42.8	32.9	31.3	33.2	18.2
Medical research	43.2	10.8	12.0	11.0	0.5
Administration	46.0	34.5	23.6	34.3	31.5

Table J. Percent distribution of active ophthalmologists by principal type of employment, according to selected clinical and nonclinical activity: United States, 1968

Activity	All types	Principal type of employment			
		Self-employed		Salaried	
		Solo practice	Multiple physician practice	Medical school	Other than medical school
Clinical					
Ophthalmology	100.0	68.4	26.6	2.5	2.5
Otolaryngology	100.0	80.9	15.7	0.2	3.0
Other medical activity	100.0	70.5	20.9	3.9	4.7
Nonclinical					
Teaching	100.0	58.6	31.5	6.9	3.0
Medical rasearch	100.0	48.8	24.7	19.3	7.2
Administration	100.0	62.0	30.1	4.9	3.0

SELECTED FINDINGS AMONG ACTIVE OPHTHALMOLOGISTS

1. There were an estimated 8,616 ophthalmologists active in their profession in the United States in 1968.
2. This figure reflects a slow but progressive increase over former years in the ratio of active ophthalmologists to general population.
3. Regionally, the South and North Central Regions were lowest in numbers of ophthalmologists per 100,000 population; the Northeast and West Regions were highest.
4. D.O. ophthalmologists favored the North Central Region, especially the States of Michigan, Missouri, and Ohio.
5. In median age, the ophthalmologist tended to be at least 2 years older than the typical member of the active and formally qualified M.D. population.
6. Substantially over one-half of all ophthalmologists held an active license in only one State. Number of States licensed in showed an inverse relationship to the age of the ophthalmologist.
7. Solo practice was predominantly the principal type of employment among all ophthalmologists. Solo practitioners not only showed the highest degree of participation in clinical activities; they also showed relatively more involvement in such nonclinical functions as teaching and medical research.

8. Of the types of multiple-physician practice, the partnership was the most favored. Participation in multiple-physician arrangements varied inversely with the age of the ophthalmologist.

9. Only 5.3 percent of all ophthalmologists were salaried by other employers, the largest number of these—222—by medical schools. Only about 2 percent of all ophthalmologists reported that they were salaried by hospitals as their principal type of employment.

10. There was a national tendency to work at the maximum volume of activity—that is, over 48 weeks per year and over 48 hours per week. This tendency appeared strongest in areas showing the lowest ratios of ophthalmologists to population. It was evident regardless of the ophthalmologist's principal type of employment, although it appeared strongest among ophthalmologists who devoted at least a part of their working week to teaching and medical research.

11. The overwhelming majority of ophthalmologists (about 97 percent) spent some or all of their working week in the direct care of eye patients.

12. As a possible legacy from earlier days when EENT was a unified specialty, many older ophthalmologists—with a median age of about 60 years—tended to devote some of their time to clinical otolaryngology. Respondents who were primarily active in the practice of clinical ophthalmology tended to cluster in the younger interval from 50 to 54 years.

13. Substantial numbers of ophthalmologists tended to devote at least part of their time to the nonclinical activities of teaching, research, and administration. Ophthalmologists who were not self-employed did most of their teaching and research in medical schools. Most of the ophthalmologists, however, who reported engaging in some teaching or medical research tended to be self-employed and engaged in solo practice.

REFERENCES

[1] Department of Survey Research, Center for Health Services Research and Development: *Distribution of Physicians, Hospitals, and Hospital Beds in the U.S., 1968, Regional, State, County and Metropolitan Areas.* American Medical Association. Chicago, 1970.

[2] Department of Survey Research, Center for Health Services Research and Development: *Selected Characteristics of the Physician Population, 1963 and 1967.* Special Statistical Series. American Medical Association. Chicago, 1968.

[3] Fahs, Ivan J.: *Vision Manpower in the United States.* Am. J. Pub. Health. 60(9):1760-1768, Sept. 1970. (by permission of American Public Health Association).

[4] National Center for Health Statistics: *State Licensing of Health Occupations.* PHS Pub. No. 1758. Public Health Service. Washington. U.S. Government Printing Office, Oct. 1967.

LIST OF DETAILED TABLES

		Page
Table 1.	Number and percent distribution of total ophthalmologists by activity status: United States and each State, 1968	20
2.	Number of ophthalmologists and number active and number per 100,000 civilian population: United States and each State, 1968	21
3.	Number and percent distribution of active ophthalmolgists by professional identity and board certification: United States and each State, 1968	22
4.	Number and percent distribution of active ophthalmologists by age: United States and each State, 1968	23
5.	Number and percent distribution of active ophthalmologists by age, according to selected characteristics: United States, 1968	25
6.	Number and percent distribution of active ophthalmologists by age, according to volume of activity, number of eye patients, services rendered, and whether or not assisted by supplementary personnel: United States, 1968	27
7.	Number and percent distribution of active ophthalmologists by range of licensure and professional identity: United States and each State, 1968	29
8.	Number and percent distribution of active ophthalmologists by principal type of employment: United States and each State, 1968	30
9.	Number and percent distribution of active ophthalmologists by principal type of employment, according to selected characteristics: United States, 1968	32
10.	Number and percent distribution of active ophthalmologists by volume of activity: United States and each State, 1968	33
11.	Number and percent distribution of active ophthalmologists by volume of activity, according to selected characteristics: United States, 1968	35
12.	Number of active ophthalmologists by participation in selected clinical and nonclinical activities: United States and each State, 1968	37
13.	Number of active ophthalmologists by participation in selected clinical and nonclinical activities, by selected characteristics: United States, 1968	38
14.	Number and percent distribution of active ophthalmologists by percent of time spent per week in clinical ophthalmology, according to selected characteristics: United States, 1968	39
15.	Number and percent distribution of active ophthalmologists by percent of time spent per week in clinical otolaryngology, according to selected characteristics: United States, 1968	41
16.	Number and percent distribution of active ophthalmologists by percent of time spent per week in teaching, according to selected characteristics: United States, 1968	43
17.	Number and percent distribution of active ophthalmologists by percent of time spent per week in medical research, according to selected characteristics: United States, 1968	45
18.	Number and percent distribution of active ophthalmologists by percent of time spent per week in administration, according to selected characteristics: United States, 1968	47

(Owing to the effects of rounding, numbers will not always cumulate to the exact totals expected and percent distributions based on these numbers will reflect these rounding discrepancies.)

Table 1. Number and percent distribution of total ophthalmologists by activity status: United States and each State, 1968

State	Activity status				Activity status			
	Total	Active	Inactive but not retired	Retired	Total	Active	Inactive but not retired	Retired
	Number				Percent distribution			
United States-----	9,056	8,616	129	311	100.0	95.1	1.4	3.4
Alabama-----	89	87	#	#	100.0	97.5	#	#
Alaska-----	5	5	-	-	100.0	100.0	-	-
Arizona-----	84	80	#	#	100.0	94.9	#	#
Arkansas-----	43	41	#	#	100.0	95.0	#	#
California-----	1,124	1,079	11	34	100.0	96.0	1.0	3.1
Colorado-----	128	123	-	5	100.0	95.9	-	4.1
Connecticut-----	158	152	3	3	100.0	95.7	2.2	2.2
Delaware-----	23	21	#	#	100.0	90.0	#	#
District of Columbia----	89	81	3	5	100.0	91.6	2.8	5.6
Florida-----	324	302	7	16	100.0	93.8	2.1	4.9
Georgia-----	147	142	#	#	100.0	97.0	#	#
Hawaii-----	31	30	#	#	100.0	96.4	#	#
Idaho-----	35	34	#	#	100.0	96.9	#	#
Illinois-----	457	429	9	18	100.0	94.0	2.0	4.0
Indiana-----	182	175	#	#	100.0	96.2	#	#
Iowa-----	113	102	4	7	100.0	90.5	3.2	6.3
Kansas-----	82	76	-	6	100.0	92.1	-	7.9
Kentucky-----	100	96	#	#	100.0	96.8	#	#
Louisiana-----	159	153	-	6	100.0	96.3	-	3.7
Maine-----	42	39	#	#	100.0	92.5	#	#
Maryland-----	174	165	4	6	100.0	94.4	2.1	3.5
Massachusetts-----	290	280	#	#	100.0	96.9	#	#
Michigan-----	356	339	4	12	100.0	95.3	1.3	3.5
Minnesota-----	154	148	-	6	100.0	95.8	-	4.2
Mississippi-----	65	62	#	#	100.0	95.1	#	#
Missouri-----	200	190	4	6	100.0	94.7	2.1	3.2
Montana-----	41	39	#	#	100.0	94.9	#	#
Nebraska-----	59	55	-	4	100.0	93.9	-	6.1
Nevada-----	16	16	-	-	100.0	100.0	-	-
New Hampshire-----	31	27	#	#	100.0	86.7	#	#
New Jersey-----	321	307	4	9	100.0	95.8	1.4	2.8
New Mexico-----	45	45	-	-	100.0	100.0	-	-
New York-----	1,068	1,017	18	34	100.0	95.2	1.7	3.1
North Carolina-----	183	174	3	6	100.0	95.2	1.8	3.0
North Dakota-----	20	20	-	-	100.0	100.0	-	-
Ohio-----	414	392	4	17	100.0	94.7	1.1	4.2
Oklahoma-----	102	97	#	#	100.0	94.6	#	#
Oregon-----	111	109	#	#	100.0	98.1	#	#
Pennsylvania-----	619	585	8	27	100.0	94.4	1.3	4.3
Rhode Island-----	33	32	#	#	100.0	96.8	#	#
South Carolina-----	75	72	#	#	100.0	97.0	#	#
South Dakota-----	23	22	#	#	100.0	95.5	#	#
Tennessee-----	139	131	4	3	100.0	94.4	3.2	2.4
Texas-----	429	405	6	18	100.0	94.5	1.3	4.2
Utah-----	49	47	#	#	100.0	95.7	#	#
Vermont-----	20	19	#	#	100.0	95.0	#	#
Virginia-----	169	166	#	#	100.0	98.0	#	#
Washington-----	169	160	4	4	100.0	94.8	2.6	2.6
West Virginia-----	70	64	#	#	100.0	92.1	#	#
Wisconsin-----	180	168	#	#	100.0	93.6	#	#
Wyoming-----	16	16	-	-	100.0	100.0	-	-

#Data suppressed to comply with confidentiality requirements.

Table 2. Number of ophthalmologists and number active and number per 100,000 civilian population: United States and each State, 1968

State	Total number of ophthalmologists	Number of active ophthalmologists	Number per 100,000 population[1]	
			Total ophthalmologists	Active ophthalmologists
United States	9,056	8,616	4.6	4.4
Alabama	89	87	2.6	2.5
Alaska	5	5	2.1	2.1
Arizona	84	80	5.1	4.9
Arkansas	43	41	2.2	2.1
California	1,124	1,079	6.0	5.7
Colorado	128	123	6.4	6.1
Connecticut	158	152	5.4	5.2
Delaware	23	21	4.4	4.0
District of Columbia	89	81	11.3	10.3
Florida	324	302	5.3	4.9
Georgia	147	142	3.3	3.2
Hawaii	31	30	4.3	4.2
Idaho	35	34	5.0	4.8
Illinois	457	429	4.2	3.9
Indiana	182	175	3.6	3.5
Iowa	113	102	4.1	3.7
Kansas	82	76	3.6	3.4
Kentucky	100	96	3.2	3.0
Louisiana	159	153	4.3	4.2
Maine	42	39	4.4	4.0
Maryland	174	165	4.8	4.5
Massachusetts	290	280	5.4	5.2
Michigan	356	339	4.1	3.9
Minnesota	154	148	4.2	4.0
Mississippi	65	62	2.8	2.7
Missouri	200	190	4.4	4.2
Montana	41	39	6.0	5.7
Nebraska	59	55	4.1	3.8
Nevada	16	16	3.6	3.6
New Hampshire	31	27	4.4	3.9
New Jersey	321	307	4.6	4.4
New Mexico	45	45	4.6	4.6
New York	1,068	1,017	5.9	5.6
North Carolina	183	174	3.6	3.5
North Dakota	20	20	3.3	3.3
Ohio	414	392	3.9	3.7
Oklahoma	102	97	4.1	3.9
Oregon	111	109	5.6	5.5
Pennsylvania	619	585	5.3	5.0
Rhode Island	33	32	3.7	3.6
South Carolina	75	72	2.9	2.8
South Dakota	23	22	3.5	3.3
Tennessee	139	131	3.5	3.3
Texas	429	405	4.0	3.7
Utah	49	47	4.8	4.6
Vermont	20	19	4.7	4.4
Virginia	169	166	3.8	3.7
Washington	169	160	5.3	5.0
West Virginia	70	64	3.9	3.5
Wisconsin	180	168	4.3	4.0
Wyoming	16	16	5.0	5.0

[1] Census estimates for July 1, 1968, in U.S. Bureau of the Census, "Population Estimates," Current Population Reports, Series P-25, No. 436, Jan. 7, 1970.

Table 3. Number and percent distribution of active ophthalmologists by professional identity and board certification: United States and each State, 1968

State	Total	M.D.		D.O.	Total	M.D.		D.O.
		Board certified	Not board certified			Board certified	Not board certified	
	Number				Percent distribution			
United States	8,616	4,952	3,482	181	100.0	57.5	40.4	2.1
Alabama	87	38	49	-	100.0	43.7	56.3	-
Alaska	5	3	2	-	100.0	60.0	40.0	-
Arizona	80	49	27	4	100.0	61.3	33.8	5.0
Arkansas	41	19	21	-	100.0	47.5	52.5	-
California	1,079	687	391	1	100.0	63.7	36.2	0.1
Colorado	123	83	34	6	100.0	67.5	27.6	4.9
Connecticut	152	97	54	1	100.0	63.8	35.5	0.7
Delaware	21	12	9	-	100.0	57.1	42.9	-
District of Columbia	81	61	20	-	100.0	75.3	24.7	-
Florida	302	165	127	10	100.0	54.6	42.1	3.3
Georgia	142	70	72	-	100.0	49.3	50.7	-
Hawaii	30	13	17	-	100.0	43.3	56.7	-
Idaho	34	16	17	-	100.0	48.5	51.5	-
Illinois	429	253	175	1	100.0	59.0	40.8	0.2
Indiana	175	104	70	1	100.0	59.4	40.0	0.6
Iowa	102	37	57	8	100.0	36.3	55.9	7.8
Kansas	76	31	41	3	100.0	41.3	54.7	4.0
Kentucky	96	52	43	1	100.0	54.2	44.8	1.0
Louisiana	153	68	85	-	100.0	44.4	55.6	-
Maine	39	19	19	1	100.0	48.7	48.7	2.6
Maryland	165	90	75	-	100.0	54.5	45.5	-
Massachusetts	280	166	113	1	100.0	59.3	40.4	0.4
Michigan	339	193	121	26	100.0	56.8	35.6	7.7
Minnesota	148	96	52	-	100.0	64.9	35.1	-
Mississippi	62	28	34	-	100.0	45.2	54.8	-
Missouri	190	102	54	34	100.0	53.7	28.4	17.9
Montana	39	17	22	-	100.0	43.6	56.4	-
Nebraska	55	36	19	-	100.0	65.5	34.5	-
Nevada	16	11	5	-	100.0	68.8	31.3	-
New Hampshire	27	18	9	-	100.0	66.7	33.3	-
New Jersey	307	159	143	6	100.0	51.6	46.4	2.0
New Mexico	45	18	24	3	100.0	40.0	53.3	6.7
New York	1,017	673	342	2	100.0	66.2	33.6	0.2
North Carolina	174	79	95	-	100.0	45.4	54.6	-
North Dakota	20	9	11	-	100.0	45.0	55.0	-
Ohio	392	234	136	22	100.0	59.7	34.7	5.6
Oklahoma	97	43	48	6	100.0	44.3	49.5	6.2
Oregon	109	72	36	1	100.0	66.1	33.0	0.9
Pennsylvania	585	303	268	14	100.0	51.8	45.8	2.4
Rhode Island	32	15	16	1	100.0	46.9	50.0	3.1
South Carolina	72	32	41	-	100.0	43.8	56.2	-
South Dakota	22	13	6	3	100.0	59.1	27.3	13.6
Tennessee	131	76	54	1	100.0	58.0	41.2	0.8
Texas	405	237	151	17	100.0	58.5	37.3	4.2
Utah	47	31	16	-	100.0	66.0	34.0	-
Vermont	19	9	10	-	100.0	47.4	52.6	-
Virginia	166	82	84	-	100.0	49.4	50.6	-
Washington	160	94	65	1	100.0	58.8	40.6	0.6
West Virginia	64	27	36	2	100.0	41.5	55.4	3.1
Wisconsin	168	106	61	1	100.0	63.1	36.3	0.6
Wyoming	16	9	6	1	100.0	56.3	37.5	6.3

Table 4. Number and percent distribution of active ophthalmologists by age: United States and each State, 1968

State	Total	Age				
		Under 35 years	35-44 years	45-54 years	55-64 years	65 years and over
	Number					
United States	8,616	789	2,255	1,974	2,238	1,360
Alabama	87	10	18	23	23	12
Alaska	5	#	#	#	#	-
Arizona	80	4	29	15	18	14
Arkansas	41	#	9	17	9	#
California	1,079	107	325	279	245	123
Colorado	123	7	42	26	32	16
Connecticut	152	10	44	40	35	22
Delaware	21	#	3	5	7	#
District of Columbia	81	11	24	13	19	15
Florida	302	43	112	60	61	26
Georgia	142	11	41	37	36	18
Hawaii	30	#	4	9	12	#
Idaho	34	3	9	8	10	4
Illinois	429	26	98	100	114	91
Indiana	175	8	38	46	52	31
Iowa	102	7	24	17	33	21
Kansas	76	3	17	19	19	16
Kentucky	96	12	20	22	24	18
Louisiana	153	19	37	42	35	20
Maine	39	3	6	7	15	7
Maryland	165	23	46	30	40	25
Massachusetts	280	23	59	75	74	49
Michigan	339	46	94	69	77	53
Minnesota	148	14	38	40	38	18
Mississippi	62	4	12	11	25	11
Missouri	190	29	40	41	48	32
Montana	39	5	8	6	15	4
Nebraska	55	#	12	17	#	17
Nevada	16	#	5	3	3	#
New Hampshire	27	#	6	9	7	#
New Jersey	307	40	75	62	92	38
New Mexico	45	6	12	8	16	3
New York	1,017	90	252	196	281	198
North Carolina	174	18	54	33	40	30
North Dakota	20	#	5	6	3	#
Ohio	392	26	100	87	110	69
Oklahoma	97	9	25	18	33	12
Oregon	109	6	33	32	19	17
Pennsylvania	585	38	115	128	198	107
Rhode Island	32	#	7	#	10	8
South Carolina	72	10	19	8	19	16
South Dakota	22	#	4	6	7	#
Tennessee	131	14	43	31	28	15
Texas	405	34	118	106	81	67
Utah	47	#	16	11	10	#
Vermont	19	#	#	#	10	4
Virginia	166	12	54	30	46	24
Washington	160	21	41	49	33	16
West Virginia	64	4	6	20	21	13
Wisconsin	168	15	45	41	42	27
Wyoming	16	-	#	6	5	#

See footnote at end of table.

Table 4. Number and percent distribution of active ophthalmologists by age: United States and each State, 1968—Con.

State	Total	Age				
		Under 35 years	35-44 years	45-54 years	55-64 years	65 years and over
	Percent distribution					
United States	100.0	9.2	26.2	22.9	26.0	15.8
Alabama	100.0	11.5	20.5	26.9	26.9	14.1
Alaska	100.0	#	#	#	#	-
Arizona	100.0	5.3	36.0	18.7	22.7	17.3
Arkansas	100.0	#	21.1	42.1	21.1	#
California	100.0	9.9	30.1	25.8	22.7	11.4
Colorado	100.0	6.0	34.2	21.4	25.6	12.8
Connecticut	100.0	6.8	29.3	26.3	23.3	14.3
Delaware	100.0	#	16.7	22.2	33.3	#
District of Columbia	100.0	13.8	29.2	15.4	23.1	18.5
Flordia	100.0	14.2	37.1	19.9	20.2	8.6
Georgia	100.0	7.8	28.9	25.8	25.0	12.5
Hawaii	100.0	#	14.8	29.6	40.7	#
Idaho	100.0	9.7	25.8	22.6	29.0	12.9
Illinois	100.0	6.2	22.8	23.3	26.5	21.2
Indiana	100.0	4.6	21.7	26.3	29.6	17.8
Iowa	100.0	7.0	23.3	16.3	32.6	20.9
Kansas	100.0	4.3	22.9	25.7	25.7	21.4
Kentucky	100.0	12.1	20.9	23.1	25.3	18.7
Louisiana	100.0	12.2	24.4	27.5	22.9	13.0
Maine	100.0	8.1	16.2	18.9	37.8	18.9
Maryland	100.0	14.0	27.9	18.4	24.3	15.4
Massachusetts	100.0	8.1	21.1	26.8	26.4	17.5
Michigan	100.0	13.5	27.7	20.5	22.8	15.5
Minnesota	100.0	9.5	25.5	27.0	25.5	12.4
Mississippi	100.0	6.9	19.0	17.2	39.7	17.2
Missouri	100.0	15.1	21.2	21.8	25.1	16.8
Montana	100.0	13.5	21.6	16.2	37.8	10.8
Nebraska	100.0	#	21.7	30.4	#	30.4
Nevada	100.0	#	40.0	20.0	20.0	#
New Hampshire	100.0	#	23.1	34.6	26.9	#
New Jersey	100.0	13.0	24.5	20.2	30.0	12.3
New Mexico	100.0	12.5	27.5	17.5	35.0	7.5
New York	100.0	8.8	24.8	19.3	27.6	19.5
North Carolina	100.0	10.1	31.0	19.0	22.8	17.1
North Dakota	100.0	#	26.3	31.6	15.8	#
Ohio	100.0	6.7	25.6	22.2	28.1	17.5
Oklahoma	100.0	9.1	26.1	18.2	34.1	12.5
Oregon	100.0	5.9	30.7	29.7	17.8	15.8
Pennsylvania	100.0	6.5	19.7	21.8	33.8	18.2
Rhode Island	100.0	#	23.3	#	30.0	26.7
South Carolina	100.0	14.1	26.6	10.9	26.6	21.9
South Dakota	100.0	#	19.0	28.6	33.3	#
Tennessee	100.0	10.9	32.8	23.5	21.0	11.8
Texas	100.0	8.3	29.0	26.2	19.9	16.6
Utah	100.0	#	33.3	24.4	22.2	#
Vermont	100.0	#	#	#	52.6	21.1
Virginia	100.0	6.9	32.6	18.1	27.8	14.6
Washington	100.0	12.9	25.9	30.6	20.4	10.2
West Virginia	100.0	6.9	8.6	31.0	32.8	20.7
Wisconsin	100.0	8.6	26.5	24.1	24.7	16.0
Wyoming	100.0	-	#	40.0	33.3	#

#Data suppressed to comply with confidentiality requirements.

Table 5. Number and percent distribution of active ophthalmologists by age, according to selected characteristics: United States, 1968

Selected characteristic	Total	Current age				
		Under 35 years	35-44 years	45-54 years	55-64 years	65 years and over
	Number					
United States	8,616	789	2,255	1,974	2,238	1,360
Age at graduation						
Under 25 years	1,942	111	422	601	468	339
25-29 years	5,763	670	1,585	1,146	1,546	816
30 years and over	911	8	248	227	224	204
Sex						
Male	8,382	769	2,191	1,914	2,192	1,315
Female	233	19	64	59	46	45
Professional identity						
Doctor of medicine	8,434	779	2,227	1,929	2,170	1,329
Doctor of osteopathy	181	10	28	45	68	31
Board certification						
Certified	4,953	212	1,549	1,405	1,232	555
Not certified	3,662	577	707	569	1,006	804
Number of States where licensed						
1 State	4,901	326	1,095	1,118	1,422	941
2 States	2,362	277	710	568	534	273
3 States	950	132	315	206	204	93
4 States or more	402	54	136	82	78	52
Principal type of employment						
Self-employed						
Solo practice	5,902	376	1,355	1,356	1,735	1,080
Partnership	1,407	177	443	361	275	151
Group practice	487	56	175	124	96	37
Nongroup arrangement with other physicians	361	87	132	67	41	34
Salaried						
Medical school	222	51	108	32	24	8
Nongovernment hospital	55	12	17	9	10	7
City or county government hospital	21	8	5	3	2	3
City or county government	17	-	-	2	2	12
State government hospital	28	4	4	3	8	8
State government	12	1	1	-	9	1
Federal Government hospital	67	8	8	13	27	11
Federal Government	18	2	1	2	7	6
Other[1]	19	6	7	1	3	2
Clinical subspecialty						
General ophthalmology, medical and surgical	7,956	742	2,069	1,856	2,088	1,201
Corneal surgery	32	1	11	8	9	2
Retinal surgery	95	18	56	16	6	-
Pediatric ophthalmology	69	12	33	12	7	6
Ophthalmic pathology	14	3	3	1	1	6
Neuro-ophthalmology	22	1	13	3	3	1
Other	138	3	37	30	39	29
Unreported[2]	288	8	34	47	85	115

See footnotes at end of table.

Table 5. Number and percent distribution of active ophthalmologists by age, according to selected characteristics: United States, 1968—Con.

Selected characteristic	Total	Current age				
		Under 35 years	35-44 years	45-54 years	55-64 years	65 years and over
	Percent distribution					
United States	100.0	9.2	26.2	22.9	26.0	15.8
Age at graduation						
Under 25 years	100.0	5.7	21.7	30.9	24.1	17.5
25-29 years	100.0	11.6	27.5	19.9	26.8	14.2
30 years and over	100.0	0.8	27.2	24.9	24.6	22.4
Sex						
Male	100.0	9.2	26.1	22.8	26.2	15.7
Female	100.0	8.3	27.3	25.4	19.6	19.3
Professional identity						
Doctor of medicine	100.0	9.2	26.4	22.9	25.7	15.8
Doctor of osteopathy	100.0	5.5	15.3	24.8	37.6	16.9
Board certification						
Certified	100.0	4.3	31.3	28.4	24.9	11.2
Not certified	100.0	15.7	19.3	15.5	27.5	22.0
Number of States where licensed						
1 State	100.0	6.7	22.3	22.8	29.0	19.2
2 States	100.0	11.7	30.0	24.0	22.6	11.6
3 States	100.0	13.8	33.2	21.7	21.5	9.8
4 States or more	100.0	13.4	33.8	20.5	19.3	13.0
Principal type of employment						
Self-employed						
Solo practice	100.0	6.4	23.0	23.0	29.4	18.3
Partnership	100.0	12.6	31.5	25.6	19.6	10.7
Group practice	100.0	11.5	35.9	25.4	19.6	7.5
Nongroup arrangement with other physicians	100.0	24.1	36.5	18.[illegible]	11.4	9.3
Salaried						
Medical school	100.0	22.9	48.6	14.[illegible]	10.6	3.6
Nongovernment hospital	100.0	22.4	30.7	16.3	18.2	12.4
City or county government hospital	100.0	37.0	21.3	15.9	10.3	15.5
City or county government	100.0	-	-	13.4	12.9	73.8
State government hospital	100.0	16.2	15.8	12.0	28.2	27.9
State government	100.0	8.6	9.1	-	73.0	9.2
Federal Government hospital	100.0	11.8	12.2	19.7	39.7	16.6
Federal Government	100.0	12.9	6.7	12.1	37.3	31.0
Other[1]	100.0	29.5	35.4	5.9	17.6	11.6
Clinical subspecialty						
General ophthalmology, medical and surgical	100.0	9.3	26.0	23.3	26.2	15.1
Corneal surgery	100.0	3.5	35.8	24.7	28.9	7.1
Retinal surgery	100.0	18.9	58.5	16.6	6.0	-
Pediatric ophthalmology	100.0	17.7	46.6	17.8	9.8	7.9
Ophthalmic pathology	100.0	23.0	23.2	7.5	8.0	38.3
Neuro-ophthalmology	100.0	5.1	59.8	14.7	15.0	5.4
Other	100.0	2.4	26.7	21.8	28.3	20.9
Unreported[2]	100.0	2.8	11.6	16.3	29.3	40.0

[1]Includes all types of insurance carriers, pharmaceutical companies, corporations, voluntary associations, medical societies, associations, etc.

[2]These are ophthalmologists who reported earlier in the survey questionnaire that they spent no time whatever in direct care of patients.

Table 6. Number and percent distribution of active ophthalmologists by age, according to volume of activity, number of eye patients, services rendered, and whether or not assisted by supplementary personnel: United States, 1968

Selected characteristic	Total	Age				
		Under 35 years	35-44 years	45-54 years	55-64 years	65 years and over
	Number					
United States	8,616	789	2,255	1,974	2,238	1,360
Volume of activity						
Less than 48 weeks per year:						
1-34 hours per week	450	7	24	43	147	230
35 hours or more per week	1,736	73	376	458	589	239
48-52 weeks per year:						
1-34 hours per week	603	18	50	68	162	305
35-48 hours per week	2,485	233	605	528	708	411
49 hours or more per week	3,341	457	1,201	877	632	174
Number of eye patients per week						
Less than 50 patients	1,851	184	241	249	561	618
50-99 patients	3,026	347	809	644	801	424
100-149 patients	2,433	202	828	695	550	159
150-199 patients	717	30	251	235	168	32
200 patients or more	300	18	94	104	74	11
No patient care	288	8	34	47	85	115
Services rendered to patients						
Diagnostic examination						
Yes	8,282	779	2,214	1,920	2,140	1,229
No	334	10	41	54	98	131
Medical treatment						
Yes	8,154	774	2,193	1,904	2,104	1,178
No	462	15	62	69	134	182
Eye surgery						
Yes	7,400	773	2,176	1,829	1,839	782
No	1,216	16	79	144	399	577
Visual field examination and medical interpretation						
Yes	7,802	763	2,166	1,835	1,965	1,074
No	814	26	89	139	273	286
Fitting contact lenses						
Yes	4,834	634	1,694	1,176	1,003	326
No	3,782	155	561	798	1,235	1,033
Orthoptic training						
Yes	2,710	334	931	644	546	255
No	5,906	455	1,324	1,330	1,692	1,105
Prescribing low vision aids						
Yes	4,571	542	1,457	1,091	1,015	466
No	4,044	247	798	883	1,223	893
Aniseikonic testing						
Yes	786	80	261	181	169	96
No	7,830	709	1,994	1,793	2,069	1,264
Tonography-						
Yes	4,148	343	1,129	995	1,066	616
No	4,468	446	1,127	979	1,172	744
Assisted by supplementary personnel						
Yes	7,882	746	2,193	1,868	2,009	1,067
No	733	43	63	106	229	293

Table 6. Number and percent distribution of active ophthalmologists by age, according to volume of activity, number of eye patients, services rendered, and whether or not assisted by supplementary personnel: United States, 1968—Con.

Selected characteristic	Total	Age				
		Under 35 years	35-44 years	45-54 years	55-64 years	65 years and over
	Percent distribution					
United States	100.0	9.2	26.2	22.9	25.0	15.8
Volume of activity						
Less than 48 weeks per year:						
1-34 hours per week	100.0	1.5	5.3	9.5	32.7	51.1
35 hours or more per week	100.0	4.2	21.6	26.4	33.9	13.8
48-52 weeks per year:						
1-35 hours per week	100.0	3.0	8.3	11.3	26.9	50.6
35-48 hours per week	100.0	9.4	24.3	21.3	28.5	16.5
49 hours or more per week	100.0	13.7	35.9	26.3	18.9	5.2
Number of eye patients per week						
Less than 50 patients	100.0	9.9	13.0	13.4	30.3	33.4
50-99 patients	100.0	11.5	26.7	21.3	26.5	14.0
100-149 patients	100.0	8.3	34.0	28.6	22.6	6.5
150-199 patients	100.0	4.2	35.0	32.8	23.4	4.5
200 patients or more	100.0	6.0	31.2	34.6	24.5	3.7
No patient care	100.0	2.8	11.6	16.3	29.3	40.0
Services rendered to patients						
Diagnostic examination						
Yes	100.0	9.4	26.7	23.2	25.8	14.8
No	100.0	3.0	12.3	16.2	29.3	39.2
Medical treatment						
Yes	100.0	9.5	26.9	23.4	25.8	14.5
No	100.0	3.2	13.4	14.9	29.0	39.4
Eye surgery						
Yes	100.0	10.4	29.4	24.7	24.9	10.6
No	100.0	1.3	6.5	11.9	32.8	47.5
Visual field examination and medical interpretation						
Yes	100.0	9.8	27.8	23.5	25.2	13.8
No	100.0	3.2	11.1	17.1	33.5	35.1
Fitting contact lenses						
Yes	100.0	13.1	35.1	24.3	20.8	6.8
No	100.0	4.1	14.8	21.1	32.7	27.3
Orthoptic training						
Yes	100.0	12.3	34.4	23.8	20.1	9.4
No	100.0	7.7	22.4	22.5	28.7	18.7
Prescribing low vision aids						
Yes	100.0	11.9	31.9	23.9	22.2	10.2
No	100.0	6.1	19.7	21.8	30.2	22.1
Aniseikonic testing						
Yes	100.0	10.2	33.2	23.0	21.5	12.2
No	100.0	9.1	25.5	22.9	26.4	16.1
Tonography						
Yes	100.0	8.3	27.2	24.0	25.7	14.9
No	100.0	10.0	25.2	21.9	26.2	16.6
Assisted by supplementary personnel						
Yes	100.0	9.5	27.8	23.7	25.5	13.5
No	100.0	5.9	8.6	14.4	31.2	39.9

Table 7. Number and percent distribution of active ophthalmologists by range of licensure and professional identity: United States and each State, 1968

State	Total	Number of States where licensed				Total	Number of States where licensed			
		1 State	2 States	3 States	4 States or more		1 State	2 States	3 States	4 States or more
	Number					Percent distribution				
United States	8,616	4,901	2,362	950	402	100.0	56.9	27.4	11.0	4.7
Alabama	87	52	27	4	3	100.0	60.3	30.8	5.1	3.8
Alaska	5	#	3	-	#	100.0	#	60.0	-	#
Arizona	80	16	32	25	6	100.0	20.0	40.0	32.0	8.0
Arkansas	41	29	5	#	#	100.0	71.1	13.2	#	#
California	1,079	646	279	114	40	100.0	59.9	25.8	10.6	3.7
Colorado	123	49	41	20	13	100.0	40.2	33.3	16.2	10.3
Connecticut	152	74	54	16	8	100.0	48.9	35.3	10.5	5.3
Delaware	21	8	8	#	#	100.0	38.9	38.9	#	#
District of Columbia	81	24	26	20	11	100.0	29.2	32.3	24.6	13.8
Florida	302	98	121	52	31	100.0	32.6	40.1	17.2	10.1
Georgia	142	75	49	14	3	100.0	53.1	34.4	10.2	2.3
Hawaii	30	13	10	7	-	100.0	44.4	33.3	22.2	-
Idaho	34	13	11	5	4	100.0	38.7	32.3	16.1	12.9
Illinois	429	240	135	36	18	100.0	56.0	31.4	8.3	4.3
Indiana	175	105	40	17	13	100.0	59.9	23.0	9.9	7.2
Iowa	102	54	27	12	10	100.0	52.3	26.7	11.6	9.3
Kansas	76	40	18	12	5	100.0	52.9	24.3	15.7	7.1
Kentucky	96	54	28	8	6	100.0	56.0	28.6	8.8	6.6
Louisiana	153	116	26	#	#	100.0	75.6	16.8	#	#
Maine	39	25	8	#	#	100.0	64.9	21.6	#	#
Maryland	165	87	41	23	13	100.0	52.9	25.0	14.0	8.1
Massachusetts	280	179	70	25	7	100.0	63.8	24.8	8.9	2.4
Michigan	339	209	84	36	10	100.0	61.7	24.8	10.6	3.0
Minnesota	148	83	42	17	5	100.0	56.2	28.5	11.7	3.7
Mississippi	[illegible]	40	15	#	#	100.0	63.8	24.1	#	#
Missouri	190	91	55	32	12	100.0	48.0	29.1	16.8	6.1
Montana	39	16	9	9	4	100.0	40.5	24.3	24.3	10.8
Nebraska	55	26	18	#	#	100.0	47.8	32.6	#	#
Nevada	16	6	#	5	#	100.0	40.0	#	33.3	#
New Hampshire	27	9	11	6	-	100.0	34.6	42.3	23.1	-
New Jersey	307	134	112	37	24	100.0	43.7	36.5	11.9	7.9
New Mexico	45	12	21	6	6	100.0	27.5	47.5	12.5	12.5
New York	1,017	691	223	85	18	100.0	68.0	21.9	8.4	1.8
North Carolina	174	109	48	6	11	100.0	62.7	27.8	3.2	6.3
North Dakota	20	4	8	#	#	100.0	21.1	42.1	#	#
Ohio	392	213	130	32	19	100.0	54.2	33.1	8.1	4.7
Oklahoma	97	67	18	#	#	100.0	69.3	18.2	#	#
Oregon	109	41	35	23	11	100.0	37.6	31.7	20.8	9.9
Pennsylvania	585	422	104	40	19	100.0	72.1	17.8	6.8	3.2
Rhode Island	32	17	8	#	#	100.0	53.3	26.7	#	#
South Carolina	72	50	16	7	-	100.0	68.8	21.9	9.4	-
South Dakota	22	6	#	7	#	100.0	28.6	#	33.3	#
Tennessee	131	75	39	13	4	100.0	57.1	29.4	10.1	3.4
Texas	405	256	87	40	21	100.0	63.3	21.5	9.9	5.2
Utah	47	21	17	#	#	100.0	44.4	35.6	#	#
Vermont	19	11	7	#	#	100.0	57.9	36.8	#	#
Virginia	166	113	36	#	#	100.0	68.1	21.5	#	#
Washington	160	59	60	33	9	100.0	36.7	37.4	20.4	5.4
West Virginia	64	36	19	3	7	100.0	55.2	29.3	5.2	10.3
Wisconsin	168	81	64	20	3	100.0	48.1	38.3	11.7	1.9
Wyoming	16	#	7	3	#	100.0	#	46.7	20.0	#

#Data suppressed to comply with confidentiality requirements.

Table 8. Number and percent distribution of active ophthalmologists by principal type of employment: United States and each State, 1968

State	Total	Principal type of employment					
		Self-employed				Salaried	
		Solo practice	Partnership	Group practice	Nongroup arrangement with other physicians	Hospital[1]	Non-hospital[2]
	Number						
United States	8,616	5,902	1,407	487	361	171	288
Alabama	87	60	12	10	#	#	#
Alaska	5	4	-	#	-	-	#
Arizona	80	54	19	3	#		#
Arkansas	41	26	9	#	3	-	#
California	1,079	697	186	83	59	15	37
Colorado	123	70	33	5	9	#	#
Connecticut	152	117	22	5	#	#	6
Delaware	21	16	#	#	#	-	-
District of Columbia	81	40	16	#	#	7	11
Florida	302	198	55	15	14	7	13
Georgia	142	99	23	9	3	4	3
Hawaii	30	19	8	3	-	-	-
Idaho	34	25	5	-	3	-	-
Illinois	429	282	76	29	22	10	10
Indiana	175	136	22	10	#	#	3
Iowa	102	55	30	7	#	#	10
Kansas	76	53	11	5	5	#	#
Kentucky	96	64	14	11	#	#	5
Louisiana	153	87	34	11	9	7	6
Maine	39	34	4	#	-	-	#
Maryland	165	119	24	#	#	4	16
Massachusetts	280	219	16	10	16	8	11
Michigan	339	214	62	32	12	12	8
Minnesota	148	60	40	23	13	4	8
Mississippi	62	39	16	3	3	#	#
Missouri	190	112	45	10	7	3	13
Montana	39	27	7	3	-	#	#
Nebraska	55	30	22	4	-	-	-
Nevada	16	10	4	-	#	-	#
New Hampshire	27	21	-	4	#	-	#
New Jersey	307	255	26	9	8	#	#
New Mexico	45	35	#	#	3	3	-
New York	1,017	780	102	20	35	23	59
North Carolina	174	110	35	15	#	#	8
North Dakota	20	11	6	3	-	-	-
Ohio	392	282	58	20	20	7	5
Oklahoma	97	76	12	6	#	#	#
Oregon	109	70	17	8	8	#	#
Pennsylvania	585	470	62	14	14	10	14
Rhode Island	32	30	#	-	-	-	#
South Carolina	72	44	18	3	3	#	#
South Dakota	22	17	#	#	#	#	-
Tennessee	131	91	25	3	7	#	#
Texas	405	256	87	28	19	8	7
Utah	47	29	8	5	3	#	#
Vermont	19	19	-	-	-	-	-
Virginia	166	108	36	5	10	3	3
Washington	160	93	39	13	9	#	#
West Virginia	64	42	9	7	#	3	#
Wisconsin	168	88	42	21	9	#	#
Wyoming	16	12	3	#	-	-	#

See footnotes at end of table.

Table 8. Number and percent distribution of active ophthalmologists by principal type of employment: United States and each State, 1968—Con.

State	Total	Principal type of employment					
		Self-employed				Salaried	
		Solo practice	Partnership	Group practice	Nongroup arrangement with other physicians	Hospital[1]	Non-hospital[2]
	Percent distribution						
United States	100.0	68.5	16.3	5.7	4.2	2.0	3.3
Alabama	100.0	69.2	14.1	11.5	#	#	#
Alaska	100.0	80.0	-	#	-	-	#
Arizona	100.0	68.0	24.0	4.0	#	-	#
Arkansas	100.0	63.2	21.1	#	7.9	-	#
California	100.0	64.6	17.3	7.7	5.5	1.4	3.5
Colorado	100.0	57.3	26.5	4.3	7.7	#	#
Connecticut	100.0	77.4	14.3	3.0	#	#	3.8
Delaware	100.0	77.8	#	#	#	-	-
District of Columbia	100.0	49.2	20.0	#	#	7.7	13.8
Florida	100.0	65.5	18.4	4.9	4.5	2.2	4.5
Georgia	100.0	69.5	16.4	6.3	2.3	3.1	2.3
Hawaii	100.0	63.0	25.9	11.1	-	-	-
Idaho	100.0	74.2	16.1	-	9.7	-	-
Illinois	100.0	65.7	17.7	6.7	5.1	2.4	2.4
Indiana	100.0	77.6	12.5	5.9	#	#	2.0
Iowa	100.0	53.5	29.1	7.0	#	#	9.3
Kansas	100.0	70.0	14.3	7.1	7.1	#	#
Kentucky	100.0	65.9	14.3	11.0	#	#	5.5
Louisiana	100.0	56.5	22.1	6.9	6.1	4.6	3.8
Maine	100.0	86.5	10.8	#	-	-	#
Maryland	100.0	72.1	14.7	#	#	2.2	9.6
Massachusetts	100.0	78.0	5.7	3.7	5.7	2.8	4.1
Michigan	100.0	63.0	18.2	9.6	3.6	3.3	2.3
Minnesota	100.0	40.9	27.0	15.3	8.8	2.9	5.1
Mississippi	100.0	62.1	25.9	5.2	5.2	#	#
Missouri	100.0	59.2	23.5	5.0	3.9	1.7	6.7
Montana	100.0	70.3	18.9	8.1	-	#	#
Nebraska	100.0	54.3	39.1	6.5	-	-	-
Nevada	100.0	60.0	26.7	-	#	-	#
New Hampshire	100.0	76.9	-	15.4	#	-	#
New Jersey	100.0	83.0	8.3	2.9	2.5	#	#
New Mexico	100.0	77.5	#	#	7.5	7.5	-
New York	100.0	76.7	10.0	2.0	3.4	2.1	5.8
North Carolina	100.0	63.3	20.3	8.9	#	#	4.4
North Dakota	100.0	52.6	31.6	15.8	-	-	-
Ohio	100.0	71.9	14.7	5.0	5.0	1.9	1.4
Oklahoma	100.0	78.4	12.5	5.7	#	#	#
Oregon	100.0	64.4	15.8	6.9	6.9	#	#
Pennsylvania	100.0	80.3	10.6	2.5	2.5	1.7	2.5
Rhode Island	100.0	93.3	#	-	-	-	#
South Carolina	100.0	60.9	25.0	4.7	4.7	#	#
South Dakota	100.0	76.2	#	#	#	#	-
Tennessee	100.0	69.7	19.3	2.5	5.0	#	#
Texas	100.0	63.3	21.5	6.9	4.7	1.9	1.7
Utah	100.0	62.2	17.8	11.1	6.7	#	#
Vermont	100.0	100.0	-	-	-	-	-
Virginia	100.0	65.3	21.5	2.8	6.3	2.1	2.1
Washington	100.0	57.8	24.5	8.2	5.4	#	#
West Virginia	100.0	65.5	13.8	10.3	#	5.2	#
Wisconsin	100.0	52.5	24.7	12.3	5.6	#	#
Wyoming	100.0	73.3	20.0	#	-	-	#

[1] Includes nongovernment hospitals; and city, county, State, and Federal Government hospitals.

[2] Includes medical schools; city, county, State, and Federal Government agencies; and other (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, etc.).

Data suppressed to comply with confidentiality requirements.

Table 9. Number and percent distribution of active ophthalmolists by principal type of employment, according to selected characteristics: United States, 1968

Selected characteristic	Total	Principal type of employment					
		Self-employed			Salaried		
		Solo practice	Partnership	Group practice	Nongroup arrangement with other physicians	Hospital[1]	Non-hospital[2]
	Number						
United States	8,616	5,902	1,407	487	361	171	288
Sex							
Male	8,382	5,753	1,374	471	344	167	273
Female	233	149	33	16	17	5	15
Professional identity							
Doctor of medicine	8,434	5,760	1,392	471	355	170	286
Doctor of osteopathy	181	143	15	16	6	1	1
Number of States where licensed							
1 State	4,901	3,451	804	232	188	85	141
2 States	2,362	1,574	392	168	102	48	78
3 States	950	616	146	60	55	28	44
4 States for more	402	261	65	28	15	9	23
Volume of activity							
Less than 48 weeks per year:							
1-34 hours per week	450	364	39	16	12	4	16
35 hours or more per week	1,736	1,146	354	118	65	18	35
48-52 weeks per year:							
1-34 hours per week	603	492	49	13	21	10	18
35-48 hours per week	2,485	1,727	391	123	106	68	71
49 hours or more per week	3,341	2,173	574	218	156	73	147
Board certification							
Certified	4,953	3,263	956	297	198	67	171
Not certified	3,662	2,639	451	190	163	104	116
	Percent distribution						
United States	100.0	68.5	16.3	5.7	4.2	2.0	3.3
Sex							
Male	100.0	68.6	16.4	5.6	4.1	1.9	3.2
Female	100.0	63.8	14.0	6.7	7.2	2.0	6.3
Professional identity							
Doctor of medicine	100.0	68.3	16.5	5.6	4.2	2.0	3.4
Doctor of osteopathy	100.0	78.6	8.2	8.8	3.3	0.6	0.6
Number of States where licensed							
1 State	100.0	70.4	16.4	4.7	3.8	1.7	2.9
2 States	100.0	66.6	16.6	7.1	4.3	2.0	3.3
3 States	100.0	64.9	15.4	6.3	5.8	3.0	4.7
4 States or more	100.0	65.0	16.2	6.9	3.8	2.2	5.9
Volume of activity							
Less than 48 weeks per year:							
1-34 hours per week	100.0	80.9	8.7	3.5	2.7	0.8	3.5
35 hours or more per week	100.0	66.0	20.4	6.8	3.8	1.0	2.0
48-52 weeks per year:							
1-34 hours per week	100.0	81.5	8.1	2.2	3.5	1.7	3.0
35-48 hours per week	100.0	69.5	15.7	5.0	4.3	2.7	2.8
49 hours or more per week	100.0	65.0	17.2	6.5	4.7	2.2	4.4
Board Certification							
Certified	100.0	65.9	19.3	6.0	4.0	1.4	3.5
Not certified	100.0	72.1	12.3	5.2	4.4	2.8	3.2

[1]Includes nongovernment hospitals and city, county, State, and Federal Government hospitals.
[2]Includes medical schools; city, county, State, and Federal Government agencies; and other (all types of insurance carries, pharmaceutical companies, corporation, voluntary organization, medical societies, associations, etc.)

Table 10. Number and percent distribution of active ophthalmologists by volume of activity: United States and each State, 1968

State	Total	Worked less than 48 weeks per year		Worked 48-52 weeks per year		
		1-34 hours per week	35 hours per week or more	1-34 hours per week	35-48 hours per week	49 hours per week or more
	Number					
United States	8,616	450	1,736	603	2,485	3,341
Alabama	87	#	10	#	42	30
Alaska	5	-	-	-	-	5
Arizona	80	#	11	#	29	28
Arkansas	41	#	7	#	16	17
California	1,079	42	188	100	356	393
Colorado	123	4	22	6	39	52
Connecticut	152	10	32	10	38	62
Delaware	21	#	5	#	10	3
District of Columbia	81	#	11	#	24	37
Florida	302	15	47	21	89	129
Georgia	142	4	17	9	44	68
Hawaii	30	#	6	#	7	9
Idaho	34	#	7	#	14	11
Illinois	429	22	122	35	121	130
Indiana	175	13	41	15	46	60
Iowa	102	6	41	4	27	24
Kansas	76	3	16	4	16	37
Kentucky	96	3	20	3	25	45
Louisiana	153	#	14	#	57	76
Maine	39	#	6	#	14	13
Maryland	165	5	27	12	48	73
Massachusetts	280	13	74	16	48	130
Michigan	339	25	82	13	88	131
Minnesota	148	3	43	5	33	64
Mississippi	62	#	10	#	21	24
Missouri	190	8	32	15	50	85
Montana	39	#	5	#	12	15
Nebraska	55	#	14	#	13	22
Nevada	16	#	#	-	10	5
New Hampshire	27	#	8	#	8	9
New Jersey	307	18	68	31	91	100
New Mexico	45	5	10	3	10	17
New York	1,017	99	264	84	254	316
North Carolina	174	9	13	15	47	90
North Dakota	20	#	4	#	4	11
Ohio	392	22	88	24	106	153
Oklahoma	97	#	14	#	41	39
Oregon	109	4	18	9	39	39
Pennsylvania	585	38	115	47	171	214
Rhode Island	32	3	11	4	4	10
South Carolina	72	5	9	6	20	32
South Dakota	22	#	5	#	3	12
Tennessee	131	4	25	7	36	59
Texas	405	11	47	17	133	197
Utah	47	#	7	#	17	20
Vermont	19	#	7	#	3	7
Virginia	166	7	28	9	48	74
Washington	160	5	28	13	48	66
West Virginia	64	7	14	6	12	25
Wisconsin	168	5	36	3	49	75
Wyoming	16	#	#	3	4	7

See footnote at end of table.

Table 10. Number and percent distribution of active ophthalmologists by volume of activity: United States and each State, 1968—Con.

State	Total	Worked less than 48 weeks per year		Worked 48-52 weeks per year		
		1-34 hours per week	35 hours per week or more	1-34 hours per week	35-48 hours per week	49 hours per week or more
	Percent distribution					
United States	100.0	5.2	20.1	7.0	28.8	38.8
Alabama	100.0	#	11.5	#	48.3	34.5
Alaska	100.0	-	-	-	-	100.0
Arizona	100.0	#	13.8	#	36.3	35.0
Arkansas	100.0	#	17.1	#	39.0	41.5
California	100.0	3.9	17.4	9.3	33.0	36.4
Colorado	100.0	3.3	17.9	4.9	31.7	42.3
Connecticut	100.0	6.6	21.1	6.6	25.0	40.8
Delaware	100.0	#	23.8	#	47.6	14.3
District of Columbia	100.0	#	13.6	#	29.6	45.7
Florida	100.0	5.0	15.6	7.0	29.5	42.7
Georgia	100.0	2.8	12.0	6.3	31.0	47.9
Hawaii	100.0	#	20.0	#	23.3	30.0
Idaho	100.0	#	20.6	#	41.2	32.4
Illinois	100.0	5.1	28.4	8.2	28.2	30.3
Indiana	100.0	7.4	23.4	8.6	26.3	34.3
Iowa	100.0	5.9	40.2	3.9	26.5	23.5
Kansas	100.0	3.9	21.1	5.3	21.1	48.7
Kentucky	100.0	3.1	20.8	3.1	26.0	46.9
Louisiana	100.0	#	9.2	#	37.3	49.7
Maine	100.0	#	15.4	#	35.9	33.3
Maryland	100.0	3.0	16.4	7.3	29.1	44.2
Massachusetts	100.0	4.6	26.4	5.7	17.1	46.4
Michigan	100.0	7.4	24.2	3.8	26.0	38.6
Minnesota	100.0	2.0	29.1	3.4	22.3	43.2
Mississippi	100.0	#	16.1	#	33.9	38.7
Missouri	100.0	4.2	16.8	7.9	26.3	44.7
Montana	100.0	#	12.8	#	30.8	38.5
Nebraska	100.0	#	25.5	#	23.6	40.0
Nevada	100.0	#	#	-	62.5	31.3
New Hampshire	100.0	#	29.6	#	29.6	33.3
New Jersey	100.0	5.8	22.1	10.1	29.6	32.5
New Mexico	100.0	11.1	22.2	6.7	22.2	37.8
New York	100.0	9.7	26.0	8.3	25.0	31.1
North Carolina	100.0	5.2	7.5	8.6	27.0	51.7
North Dakota	100.0	#	20.0	#	20.0	55.0
Ohio	100.0	5.6	22.4	6.1	27.0	39.0
Oklahoma	100.0	#	14.4	#	42.3	40.2
Oregon	100.0	3.7	16.5	8.3	35.8	35.8
Pennsylvania	100.0	6.5	19.7	8.0	29.2	36.6
Rhode Island	100.0	9.4	34.4	12.5	12.5	31.3
South Carolina	100.0	6.9	12.5	8.3	27.8	44.4
South Dakota	100.0	#	22.7	#	13.6	54.5
Tennessee	100.0	3.1	19.1	5.3	27.5	45.0
Texas	100.0	2.7	11.6	4.2	32.8	48.6
Utah	100.0	#	14.9	#	36.2	42.6
Vermont	100.0	#	36.8	#	15.8	36.8
Virginia	100.0	4.2	16.9	5.4	28.9	44.6
Washington	100.0	3.1	17.5	8.1	30.0	41.3
West Virginia	100.0	10.9	21.9	9.4	18.8	39.1
Wisconsin	100.0	3.0	21.4	1.8	29.2	44.6
Wyoming	100.0	#	#	18.8	25.0	43.8

#Data suppressed to comply with confidentiality requirements.

Table 11. Number and percent distribution of active ophthalmologists by volume of activity, according to selected characteristics: United States, 1968

Selected characteristic	Total	Worked less than 48 weeks per year			Worked 48-52 weeks per year			
		All activity	Hours worked per week		All activity	Hours worked per week		
			1-34 hours	35 hours or more		1-34 hours	35-48 hours	49 hours or more
	Number							
United States	8,616	2,186	450	1,736	6,430	603	2,485	3,341
Sex								
Male	8,382	2,110	416	1,694	6,272	556	2,418	3,298
Female	233	75	34	41	158	47	67	44
Professional identity								
Doctor of medicine	8,434	2,144	439	1,705	6,290	585	2,423	3,282
Doctor of osteopathy	181	42	11	31	139	18	62	59
Board certification								
Certified	4,953	1,376	208	1,168	3,577	233	1,277	2,067
Not certified	3,662	809	242	568	2,853	370	1,209	1,274
Principal type of employment								
Self-employed								
Solo practice	5,902	1,510	364	1,146	4,392	492	1,727	2,173
Partnership	1,407	393	39	354	1,014	49	391	574
Group practice	487	133	16	118	354	13	123	218
Nongroup arrangement with other physicians	361	77	12	65	283	21	106	156
Salaried								
Medical school	222	32	2	30	190	12	38	140
Nongovernment hospital	55	9	4	5	46	1	15	30
City or county government hospital	21	-	-	-	21	2	8	11
City or county government	17	9	9	-	8	2	6	-
State government hospital	28	5	-	5	23	4	6	13
State government	12	6	4	2	6	-	4	2
Federal Government hospital	67	8	-	8	59	2	40	17
Federal Government	18	2	-	2	16	2	12	2
Other[1]	19	1	-	1	18	2	10	6
Assisted by supplementary personnel								
Yes	7,882	1,974	352	1,622	5,909	456	2,260	3,193
No	733	212	98	114	521	147	225	149

See footnote at end of table.

Table 11. Number and percent distribution of active ophthalmologists by volume of activity, according to selected characteristics: United States, 1968—Con.

Selected characteristic	Total	Worked less than 48 weeks per year			Worked 48-52 weeks per year			
		All activity	Hours worked per week		All activity	Hours worked per week		
			1-34 hours	35 hours or more		1-34 hours	35-48 hours	49 hours or more
		Percent distribution						
United States	100.0	25.4	5.2	20.1	74.6	7.0	28.8	38.8
Sex								
Male	100.0	25.2	5.0	20.2	74.8	6.6	28.8	39.3
Female	100.0	32.2	14.6	17.6	67.8	20.2	28.8	18.9
Professional identity								
Doctor of medicine	100.0	25.4	5.2	20.2	74.6	6.9	28.7	38.9
Doctor of osteopathy	100.0	23.2	6.1	17.1	76.8	9.9	34.3	32.6
Board certification								
Certified	100.0	27.8	4.2	23.6	72.2	4.7	25.8	41.7
Not certified	100.0	22.1	6.6	15.5	77.9	10.1	33.0	34.8
Principal type of employment								
Self-employed								
Solo practice	100.0	25.6	6.2	19.4	74.4	8.3	29.3	36.8
Partnership	100.0	27.9	2.8	25.2	72.1	3.5	27.8	40.8
Group practice	100.0	27.3	3.3	24.2	72.7	2.7	25.3	44.8
Nongroup arrangement with other physicians	100.0	21.3	3.3	18.0	78.4	5.8	29.4	43.2
Salaried								
Medical School	100.0	14.4	0.9	13.5	85.6	5.4	17.1	63.1
Nongovernment hospital	100.0	16.4	7.3	9.1	83.6	1.8	27.3	54.5
City or County government hospital	100.0	-	-	-	100.0	9.5	38.1	52.4
City or County government	100.0	52.9	52.9	-	47.1	11.8	35.3	-
State government hospital	100.0	17.9	-	17.9	82.1	14.3	21.4	46.4
State government	100.0	50.0	33.3	16.7	50.0	-	33.3	16.7
Federal Government hospital	100.0	11.9	-	11.9	88.1	3.0	59.7	25.4
Federal Government	100.0	11.1	-	11.1	88.9	11.1	66.7	11.1
Other[1]	100.0	5.3	-	5.3	94.7	10.5	52.6	31.6
Assisted by supplementary personnel								
Yes	100.0	25.0	4.5	20.6	75.0	5.8	28.7	40.5
No	100.0	28.9	13.4	15.6	71.1	20.1	30.7	20.3

[1]Includes all types of insurance carriers, pharmaceutical companies, corporations, voluntary associations, medical societies, associations, etc.

Table 12. Number of active ophthalmologists by participation in selected clinical and nonclinical activities: United States and each State, 1968

State	Total	Clinical activities			Nonclinical activities		
		Ophthalmology	Otolaryngology	Other medical activities	Teaching	Medical research	Administration[1]
United States	8,616	8,327	1,583	694	2,834	932	2,945
Alabama	87	84	29	#	29	8	29
Alaska	5	5	#	#	-	-	#
Arizona	80	78	17	7	12	4	23
Arkansas	41	41	10	-	12	3	15
California	1,079	1,043	133	99	396	129	366
Colorado	123	118	17	8	51	8	45
Connecticut	152	150	19	17	47	15	51
Delaware	21	17	5	3	12	#	8
District of Columbia	81	75	#	4	44	20	41
Florida	302	292	50	29	61	40	113
Georgia	142	138	44	6	33	10	41
Hawaii	30	30	6	4	3	#	12
Idaho	34	34	10	3	-	#	5
Illinois	429	415	98	41	140	51	141
Indiana	175	170	40	5	40	13	52
Iowa	102	99	33	8	17	8	29
Kansas	76	72	19	14	5	-	25
Kentucky	96	90	29	11	33	4	34
Louisiana	153	149	35	9	61	23	55
Maine	39	39	7	#	4	#	9
Maryland	165	155	21	10	81	33	62
Massachusetts	280	269	49	22	117	43	79
Michigan	339	333	68	34	113	28	108
Minnesota	148	147	24	11	70	11	56
Mississippi	62	59	27	#	5	-	20
Missouri	190	176	35	16	83	35	69
Montana	39	39	14	-	-	-	11
Nebraska	55	54	11	6	23	5	20
Nevada	16	16	#	-	#	-	6
New Hampshire	27	27	5	#	3	#	10
New Jersey	307	299	51	24	95	24	123
New Mexico	45	44	12	5	5	6	18
New York	1,017	980	71	76	454	170	337
North Carolina	174	167	52	12	33	23	53
North Dakota	20	20	6	#	#	#	7
Ohio	392	382	81	29	125	29	150
Oklahoma	97	95	28	13	30	#	37
Oregon	109	108	17	10	33	15	37
Pennsylvania	585	548	104	61	199	58	200
Rhode Island	32	32	8	#	12	-	8
South Carolina	72	70	21	6	15	6	25
South Dakota	22	22	4	4	3	-	6
Tennessee	131	127	22	8	46	11	41
Texas	405	396	100	34	121	36	146
Utah	47	47	6	#	18	#	15
Vermont	19	18	6	-	5	-	4
Virginia	166	160	29	7	47	16	66
Washington	160	155	33	9	40	15	58
West Virginia	64	61	24	3	4	4	21
Wisconsin	168	168	46	9	50	16	53
Wyoming	16	16	3	#	#	#	#

[1]Includes professional associations, hospital staffs, etc. Administrative duties related to the medical care of respondent's own patients are excluded here and included under clinical activities.

#Data suppressed to comply with confidentiality requirements.

Table 13. Number of active ophthalmologists by participation in selected clinical and nonclinical activities, by selected characteristics: United States, 1968

Selected characteristic	Total	Clinical activities			Nonclinical activities		
		Ophthalmology	Otolaryngology	Other medical activities	Teaching	Medical research	Administration[1]
United States	8,616	8,327	1,583	694	2,834	932	2,945
Age							
Under 35 years	789	781	17	46	388	125	305
35-39 years	1,248	1,229	21	80	671	210	577
40-44 years	1,007	992	39	62	469	158	448
45-49 years	914	894	106	70	325	108	362
50-54 years	1,060	1,033	187	103	348	107	429
55-59 years	1,177	1,136	320	104	315	91	412
60-64 years	1,061	1,018	340	105	179	53	243
65-69 years	624	594	240	47	83	32	106
70 years and over	736	650	314	77	56	47	64
Sex							
Male	8,382	8,106	1,565	672	2,761	904	2,889
Female	233	221	18	23	73	28	55
Professional identity							
Doctor of medicine	8,434	8,167	1,470	644	2,801	931	2,888
Doctor of osteopathy	181	161	113	50	33	1	57
Board certification							
Certified	4,953	4,865	330	310	2,053	637	1,965
Not certified	3,662	3,462	1,252	384	781	295	980
Principal type of employment							
Self-employed							
Solo practice	5,902	5,695	1,281	489	1,660	455	1,826
Partnership	1,407	1,385	166	80	578	134	557
Group practice	487	483	62	39	160	52	197
Nongroup arrangement with other physicians	361	352	21	26	153	44	131
Salaried							
Medical school	222	204	4	27	197	180	144
Nongovernment hospital	55	50	8	9	30	26	25
City or county government hospital	21	19	1	1	9	5	6
City or county government	17	13	1	-	2	1	2
State government hospital	28	21	7	8	10	6	11
State government	12	9	-	1	3	-	2
Federal Government hospital	67	63	24	13	23	18	32
Federal Government	18	17	6	1	1	3	7
Other[2]	19	17	1	1	7	8	6
Volume of activity							
Less than 48 weeks per year:							
1-34 hours per week	450	410	128	28	34	15	52
35 hours or more per week	1,736	1,692	291	136	584	179	625
48-52 weeks per year:							
1-34 hours per week	603	548	186	45	74	32	59
35-48 hours per week	2,485	2,396	530	190	630	169	668
49 hours or more per week	3,341	3,280	448	296	1,513	537	1,541

[1]Includes professional associations, hospital medical staffs, etc. Administrative duties related to the medical care of the respondent's own patients are excluded here and included under specific clinical activity engaged in.

[2]Includes all types of insurance carriers, pharmaceutical companies, corporations, voluntary associations, medical societies, association, etc.

Table 14. Number and percent distribution of active ophthalmologists by percent of time spent per week in clinical ophthalmology, according to selected characteristics: United States, 1968

Selected characteristic	Total	Time spent per week in clinical ophthalmology				
		No time	1-19 percent	20-49 percent	50-99 percent	100 percent
	Number					
United States	8,616	288	141	642	4,935	2,608
Age						
Under 35 years	789	8	6	51	511	213
35-39 years	1,248	19	13	66	850	300
40-44 years	1,007	15	11	45	657	279
45-49 years	914	20	11	52	532	299
50-54 years	1,060	27	22	90	598	323
55-59 years	1,177	42	23	104	662	346
60-64 years	1,061	43	25	115	504	373
65-69 years	624	29	12	51	306	225
70 years and over	736	86	17	68	315	250
Sex						
Male	8,382	276	138	630	4,831	2,508
Female	233	12	3	13	105	100
Professional identity						
Doctor of medicine	8,434	268	126	582	4,863	2,596
Doctor of osteopathy	181	21	15	60	73	12
Board certification						
Certified	4,953	88	40	203	3,024	1,598
Not certified	3,662	200	101	439	1,912	1,010
Principal type of employment						
Self-employed						
Solo practice	5,902	207	90	384	3,348	1,874
Partnership	1,407	22	12	61	884	427
Group practice	487	3	4	21	315	143
Nongroup arrangement with other physicians	361	9	7	13	228	104
Salaried						
Medical school	222	18	10	120	66	8
Nongovernment hospital	55	6	2	16	24	8
City or county government hospital	21	2	1	2	9	7
City or county government	17	3	2	-	2	9
State government hospital	28	7	1	5	12	3
State government	12	3	-	-	2	7
Federal Government hospital	67	5	5	16	32	10
Federal Government	18	1	1	5	7	5
Other	19	2	4	-	8	4
Volume of activity						
Less than 48 weeks per year:						
1-34 hours per week	450	40	9	28	167	206
35 hours or more per week	1,736	44	25	107	1,044	515
48-52 weeks per year:						
1-34 hours per week	603	55	17	45	224	263
35-48 hours per week	2,485	89	39	171	1,288	899
49 hours or more per week	3,341	60	52	291	2,213	725

See footnote at end of table.

Table 14. Number and percent distribution of active ophthalmologists by percent of time spent per week in clinical ophthalmology, according to selected characteristics: United States, 1968—Con.

Selected characteristic	Total	Time spent per week in clinical ophthalmology				
		No time	1-19 percent	20-49 percent	50-99 percent	100 percent
	Percent distribution					
United States	100.0	3.3	1.6	7.5	57.3	30.3
Age						
Under 35 years	100.0	1.0	0.7	6.5	64.8	27.0
35-39 years	100.0	1.5	1.1	5.3	68.1	24.0
40-44 years	100.0	1.5	1.1	4.5	65.2	27.7
45-49 years	100.0	2.2	1.2	5.6	58.2	32.8
50-54 years	100.0	2.5	2.1	8.5	56.4	30.5
55-59 years	100.0	3.6	2.0	8.8	56.2	29.4
60-64 years	100.0	4.0	2.4	10.9	47.5	35.2
65-69 years	100.0	4.7	2.0	8.2	49.1	36.1
70 years and over	100.0	11.7	2.2	9.3	42.9	33.9
Sex						
Male	100.0	3.3	1.6	7.5	57.6	29.9
Female	100.0	5.3	1.4	5.4	44.8	43.0
Professional identity						
Doctor of medicine	100.0	3.2	1.5	6.9	57.7	30.8
Doctor of osteopathy	100.0	11.5	8.5	33.2	40.1	6.7
Board certification						
Certified	100.0	1.8	0.8	4.1	61.0	32.3
Not certified	100.0	5.5	2.8	12.0	52.2	27.6
Principal type of employment						
Self-employed						
Solo practice	100.0	3.5	1.5	6.5	56.7	31.8
Partnership	100.0	1.6	0.9	4.3	62.8	30.4
Group practice	100.0	0.7	0.9	4.3	64.8	29.3
Nongroup arrangement with other physicians	100.0	2.5	1.9	3.7	63.1	28.8
Salaried						
Medical school	100.0	8.2	4.5	54.2	29.6	3.5
Nongovernmental hospital	100.0	10.1	4.0	28.7	42.7	14.4
City or county government hospital	100.0	10.2	5.4	10.5	42.5	31.4
City or county government	100.0	19.4	13.4	-	13.2	53.9
State government hospital	100.0	24.3	4.0	16.3	43.5	11.9
State government	100.0	27.5	-	-	18.4	54.1
Federal Government hospital	100.0	6.8	8.0	23.4	46.9	15.0
Federal Government	100.0	6.0	5.7	25.8	37.0	25.4
Other[1]	100.0	11.9	23.7	-	41.0	23.5
Volume of activity						
Less than 48 weeks per year:						
1-34 hours per week	100.0	8.9	2.0	6.2	37.2	45.7
35 hours or more per week	100.0	2.5	1.4	6.2	60.1	29.7
48-52 weeks per year:						
1-34 hours per week	100.0	9.1	2.8	7.4	37.1	43.6
35-48 hours per week	100.0	3.6	1.6	6.9	51.8	36.2
49 hours or more per week	100.0	1.8	1.6	8.7	66.2	21.7

[1]Includes all types of insurance carriers, pharmaceutical companies, corporations, voluntary associations, medical societies, associations, etc.

Table 15. Number and percent distribution of active ophthalmologists by percent of time spent per week in clinical otolaryngology, according to selected characteristics: United States, 1968

Selected characteristic	Total	Time spent per week in clinical otolaryngology				
		No time	1-19 percent	20-49 percent	50-99 percent	100 percent
	Number					
United States	8,616	7,033	218	637	727	1
Age						
Under 35 years	789	772	6	4	7	-
35-39 years	1,248	1,227	4	7	10	-
40-44 years	1,007	968	10	11	18	-
45-49 years	914	808	20	41	45	-
50-54 years	1,060	873	31	92	64	-
55-59 years	1,177	858	49	147	123	1
60-64 years	1,061	721	40	133	167	-
65-69 years	624	383	28	91	121	-
70 years or more	736	422	30	111	173	-
Sex						
Male	8,382	6,818	216	625	722	1
Female	233	215	1	11	6	-
Professional identity						
Doctor of medicine	8,434	6,964	200	592	678	-
Doctor of osteopathy	181	68	17	45	50	1
Board certification						
Certified	4,953	4,623	76	153	101	-
Not certified	3,662	2,410	141	484	627	1
Principal type of employment						
Self-employed						
Solo practice	5,902	4,621	158	510	613	1
Partnership	1,407	1,240	35	68	64	-
Group practice	487	425	9	32	21	-
Nongroup arrangement with other physicians	361	340	3	7	11	-
Salaried						
Medical school	222	217	1	1	2	-
Nongovernment hospital	55	48	1	3	3	-
City or county government hospital	21	20	-	-	1	-
City or county government	17	15	-	1	-	-
State government hospital	28	21	-	6	1	-
State government	12	12	-	-	-	-
Federal Government hospital	67	43	9	6	10	-
Federal Government	18	12	-	5	1	-
Other[1]	19	18	1	-	-	-
Volume of activity						
Less than 48 weeks per year:						
1-34 hours per week	450	322	13	46	69	-
35 hours or more per week	1,736	1,445	38	127	127	-
48-52 weeks per year:						
1-34 hours per week	603	417	17	64	104	1
35-48 hours per week	2,485	1,956	69	207	254	-
49 hours or more per week	3,341	2,893	81	193	174	-

See footnote at end of table.

Table 15. Number and percent distribution of active ophthalmologists by percent of time spent per week in clinical otolaryngology, according to selected characteristics: United States, 1968—Con.

Selected characteristic	Total	Time spent per week in clinical otolaryngology				
		No time	1-19 percent	20-49 percent	50-99 percent	100 percent
	Percent distribution					
United States	100.0	81.6	2.5	7.4	8.4	0.0
Age						
Under 35 years	100.0	97.9	0.7	0.5	0.9	-
35-39 years	100.0	98.3	0.4	0.5	0.8	-
40-44 years	100.0	96.2	1.0	1.1	1.8	-
45-49 years	100.0	88.4	2.2	4.5	4.9	-
50-54 years	100.0	82.4	2.9	8.6	6.1	-
55-59 years	100.0	72.8	4.2	12.5	10.4	0.1
60-64 years	100.0	68.0	3.8	12.5	15.7	-
65-69 years	100.0	61.5	4.5	14.6	19.5	-
70 years or more	100.0	57.3	4.1	15.1	23.5	-
Sex						
Male	100.0	81.3	2.6	7.5	8.6	0.0
Female	100.0	92.2	0.5	4.9	2.5	-
Professional identity						
Doctor of medicine	100.0	82.6	2.4	7.0	8.0	-
Doctor of osteopathy	100.0	37.7	9.6	24.7	27.4	0.6
Board certification						
Certified	100.0	93.3	1.5	3.1	2.0	-
Not certified	100.0	65.8	3.9	13.2	17.1	0.0
Principal type of employment						
Self-employed						
Solo practice	100.0	78.3	2.7	8.6	10.4	0.0
Partnership	100.0	88.2	2.5	4.8	4.5	-
Group practice	100.0	87.3	1.8	6.5	4.3	-
Nongroup arrangement with other physicians	100.0	94.2	0.9	1.8	3.1	-
Salaried						
Medical School	100.0	98.0	0.5	0.5	1.0	-
Nongovernment hospital	100.0	85.9	2.0	6.0	6.0	-
City or county government hospital	100.0	95.0	-	-	5.0	-
City or county government	100.0	93.3	-	6.7	-	-
State government hospital	100.0	75.9	-	20.2	3.9	-
State government	100.0	100.0	-	-	-	-
Federal Government hospital	100.0	63.8	13.0	8.2	14.9	-
Federal Government	100.0	68.9	-	24.8	6.3	-
Other[1]	100.0	94.3	5.7	-	-	-
Volume of activity						
Less than 48 weeks per year:						
1-34 hours per week	100.0	71.6	2.9	10.2	15.3	-
35 hours or more per week	100.0	83.2	2.2	7.3	7.3	-
48-52 weeks per year:						
1-34 hours per week	100.0	69.2	2.8	10.6	17.2	0.2
35-48 hours per week	100.0	78.7	2.8	8.3	10.2	-
49 hours or more per week	100.0	86.6	2.4	5.8	5.2	-

[1] Includes all types of insurance carriers, pharmaceutical companies, corporations, voluntary associations, medical societies, associations, etc.

Table 16. Number and percent distribution of active ophthalmologists by percent of time spent per week in teaching, according to selected characteristics: United States, 1968

Selected characteristic	Total	Time spent per week in teaching				
		No time	1-19 percent	20-49 percent	50-99 percent	100 percent
	Number					
United States	8,616	5,782	2,286	452	83	12
Age						
Under 35 years	789	401	283	94	10	-
35-39 years	1,248	577	531	121	18	1
40-44 years	1,007	538	383	81	3	1
45-49 years	914	589	270	48	7	1
50-54 years	1,060	712	307	30	9	1
55-59 years	1,177	862	268	43	4	-
60-64 years	1,061	882	148	22	9	-
65-69 years	624	541	72	6	-	6
70 years and over	736	680	24	7	23	2
Sex						
Male	8,382	5,621	2,238	435	76	11
Female	233	160	48	17	7	1
Professional identity						
Doctor of medicine	8,434	5,633	2,257	451	81	12
Doctor of osteopathy	181	148	30	1	2	-
Board certification						
Certified	4,953	2,901	1,664	339	45	5
Not certified	3,662	2,881	622	113	38	8
Principal type of employment						
Self-employed						
Solo practice	5,902	4,242	1,428	190	37	5
Partnership	1,407	829	498	72	6	2
Group practice	487	326	138	21	1	-
Nongroup arrangement with other physicians	361	207	126	27	-	1
Salaried						
Medical school	222	25	50	117	28	1
Nongovernment hospital	55	25	20	8	2	-
City or county hospital	21	12	2	3	3	-
City or county government	17	14	2	-	-	-
State government hospital	28	18	4	1	2	2
State government	12	9	1	-	2	-
Federal Government hospital	67	45	10	11	1	-
Federal Government	18	17	1	-	-	-
Other[1]	19	12	5	1	-	1
Volume of activity						
Less than 48 weeks per year:						
1-34 hours per week	450	416	21	6	6	1
35 hours or more per week	1,736	1,152	486	82	13	2
48-52 weeks per year:						
1-34 hours per week	603	529	49	9	14	2
35-48 hours per week	2,485	1,855	525	76	24	6
49 hours or more per week	3,341	1,829	1,205	279	27	1

See footnote at end of table.

Table 16. Number and percent distribution of active ophthalmologists by percent of time spent per week in teaching, according to selected characteristics: United States, 1968—Con.

Selected characteristic	Total	Time spent per week in teaching				
		No time	1-19 percent	20-49 percent	50-99 percent	100 percent
	Percent distribution					
United States	100.0	67.1	26.5	5.2	1.0	0.1
Age						
Under 35 years	100.0	50.9	35.8	12.0	1.3	-
35-39 years	100.0	46.2	42.5	9.7	1.4	0.1
40-44 years	100.0	53.4	38.1	8.0	0.3	0.1
45-49 years	100.0	64.4	29.5	5.2	0.7	0.1
50-54 years	100.0	67.2	29.0	2.9	0.8	0.1
55-59 years	100.0	73.2	22.8	3.6	0.4	-
60-64 years	100.0	83.1	13.9	2.1	0.8	-
65-69 years	100.0	86.7	11.5	0.9	-	0.9
70 years and over	100.0	92.4	3.3	0.9	3.1	0.3
Sex						
Male	100.0	67.1	26.7	5.2	0.9	0.1
Female	100.0	68.7	20.7	7.3	2.9	0.5
Professional identity						
Doctor of medicine	100.0	66.8	26.8	5.3	1.0	0.1
Doctor of osteopathy	100.0	81.8	16.4	0.6	1.2	-
Board certification						
Certified	100.0	58.6	33.6	6.9	0.9	0.1
Not certified	100.0	78.7	17.0	3.1	1.0	0.2
Principal type of employment						
Self-employed						
Solo practice	100.0	71.9	24.2	3.2	0.6	0.1
Partnership	100.0	58.9	35.4	5.1	0.4	0.2
Group practice	100.0	67.0	28.4	4.3	0.2	-
Nongroup arrangement with other physicians	100.0	57.5	34.8	7.4	-	0.3
Salaried						
Medical school	100.0	11.2	22.7	52.9	12.7	0.5
Nongovernment hospital	100.0	44.9	36.6	14.2	4.3	-
City or county government hospital	100.0	57.5	10.7	16.0	15.8	-
City or county government	100.0	86.8	13.2	-	-	-
State government hospital	100.0	64.1	15.9	3.8	8.3	7.8
State government	100.0	72.5	9.1	-	18.4	-
Federal Government hospital	100.0	66.3	15.4	16.8	1.5	-
Federal Government	100.0	93.7	6.3	-	-	-
Other[1]	100.0	64.4	23.8	5.9	-	5.9
Volume of activity						
Less than 48 weeks per year:						
1-34 hours per week	100.0	92.5	4.7	1.2	1.2	0.3
35 hours or more per week	100.0	66.4	28.0	4.7	0.7	0.1
48-52 weeks per year:						
1-34 hours per week	100.0	87.8	8.1	1.5	2.2	0.4
35-48 hours per week	100.0	74.6	21.1	3.1	1.0	0.2
49 hours or more per week	100.0	54.7	36.1	8.4	0.8	0.0

[1]Includes all types of insurance carriers, pharmaceutical companies, corporations, voluntary associations, medical societies, associations, etc.

Table 17. Number and percent distribution of active ophthalmologists by percent of time spent per week in medical research, according to selected characteristics: United States, 1968

Selected characteristic	Total	Time spent per week in medical research				
		No time	1-19 percent	20-49 percent	50-99 percent	100 percent
	Number					
United States	8,616	7,684	626	200	75	31
Age						
Under 35 years	789	664	70	37	15	3
35-39 years	1,248	1,038	127	61	21	1
40-44 years	1,007	848	117	28	10	3
45-49 years	914	806	80	17	8	3
50-54 years	1,060	953	74	19	14	-
55-59 years	1,177	1,086	71	16	-	4
60-64 years	1,061	1,008	43	8	2	-
65-69 years	624	591	21	10	1	-
70 years and over	736	689	24	5	3	16
Sex						
Male	8,382	7,479	608	194	71	30
Female	233	205	18	6	3	1
Professional identity						
Doctor of medicine	8,434	7,503	625	200	75	31
Doctor of osteopathy	181	180	1	-	-	-
Board certification						
Certified	4,953	4,317	443	146	37	10
Not certified	3,662	3,367	183	54	37	21
Principal type of employment						
Self-employed						
Solo practice	5,902	5,447	350	66	19	20
Partnership	1,407	1,273	106	19	6	3
Group practice	487	434	48	4	-	-
Nongroup arrangement with other physicians	361	317	32	9	2	-
Salaried						
Medical school	222	41	55	92	30	3
Nongovernment hospital	55	29	9	3	11	2
City or county government hospital	21	17	1	2	1	-
City or county government	17	16	-	-	-	1
State government hospital	28	22	3	1	1	-
State government	12	12	-	-	-	-
Federal Government hospital	67	49	16	1	1	-
Federal Government	18	15	2	1	-	-
Other[1]	19	11	3	1	2	1
Volume of activity						
Less than 48 weeks per year:						
1-34 hours per week	450	435	5	5	2	3
35 hours or more per week	1,736	1,557	137	34	4	3
48-52 weeks per year:						
1-34 hours per week	603	571	15	8	6	5
35-48 hours per week	2,485	2,316	107	35	13	13
49 hours or more per week	3,341	2,805	362	119	49	7

See footnote at end of table.

Table 17. Number and percent distribution of active ophthalmologists by percent of time spent per week in medical research, according to selected characteristics: United States, 1968—Con.

Selected characteristic	Total	Time spent per week in medical research				
		No time	1-19 percent	20-49 percent	50-99 percent	100 percent
	Percent distribution					
United States	100.0	89.2	7.3	2.3	0.9	0.4
Age						
Under 35 years	100.0	84.2	8.8	4.7	1.9	0.4
35-39 years	100.0	83.2	10.2	4.9	1.7	0.1
40-44 years	100.0	84.3	11.6	2.8	1.0	0.3
45-49 years	100.0	88.1	8.8	1.8	0.9	0.4
50-54 years	100.0	89.9	7.0	1.8	1.3	-
55-59 years	100.0	92.2	6.1	1.3	-	0.4
60-64 years	100.0	95.0	4.0	0.7	0.2	-
65-69 years	100.0	94.8	3.4	1.6	0.2	-
70 years and over	100.0	93.6	3.2	0.6	0.5	2.1
Sex						
Male	100.0	89.2	7.3	2.3	0.8	0.4
Female	100.0	87.9	7.8	2.4	1.5	0.5
Professional identity						
Doctor of mdeicine	100.0	89.0	7.4	2.4	0.9	0.4
Doctor of osteopathy	100.0	99.4	0.6	-	-	-
Board certification						
Certified	100.0	87.1	8.9	3.0	0.8	0.2
Not certified	100.0	91.9	5.0	1.5	1.0	0.6
Principal type employment						
Self-employed						
Solo	100.0	92.3	5.9	1.1	0.3	0.3
Partnership	100.0	90.5	7.6	1.3	0.4	0.2
Group practice	100.0	89.2	9.9	0.9	-	-
Nongroup arrangement with other physicians	100.0	87.9	8.9	2.5	0.6	-
Salaried						
Medical school	100.0	18.7	24.7	41.3	13.7	1.6
Nongovernment hospital	100.0	52.8	16.5	6.2	20.5	4.0
City or county government hospital	100.0	78.4	5.4	10.7	5.5	-
City or county government	100.0	93.6	-	-	-	6.4
State government hospital	100.0	80.0	11.6	4.1	4.3	-
State government	100.0	100.0	-	-	-	-
Federal Government hospital	100.0	72.6	23.8	1.8	1.8	-
Federal Government	100.0	81.4	12.3	6.3	-	-
Other[1]	100.0	58.6	17.7	5.9	11.8	6.0
Volume of activity						
Less than 48 weeks per year:						
1-34 hours per week	100.0	96.7	1.0	1.0	0.5	0.7
35 hours or more per week	100.0	89.7	7.9	2.0	0.2	0.2
48-52 weeks per year:						
1-34 hours per week	100.0	94.6	2.4	1.3	0.9	0.7
35-48 hours per week	100.0	93.2	4.3	1.4	0.5	0.5
49 hours or more per week	100.0	84.0	10.8	3.6	1.5	0.2

[1]Includes all types of insurance carriers, pharmaceutical companies, corporations, voluntary associations, medical societies, associations, etc.

Table 18. Number and percent distribution of active ophthalmologists by percent of time spent per week in administration, according to selected characteristics: United States, 1968

Selected characteristic	Total	Time spent per week in administration[1]				
		No time	1-19 percent	20-49 percent	50-99 percent	100 percent
	Number					
United States	8,616	5,671	2,679	212	40	13
Age						
Under 35 years	789	484	279	24	2	-
35-39 years	1,248	671	539	35	3	-
40-44 years	1,007	559	416	29	3	-
45-49 years	914	552	330	20	7	4
50-54 years	1,060	631	385	34	6	4
55-59 years	1,177	766	372	35	3	2
60-64 years	1,061	817	214	16	11	2
65-69 years	624	518	89	13	3	-
70 years and over	736	672	56	7	1	-
Sex						
Male	8,382	5,493	2,631	206	39	13
Female	233	178	49	6	1	-
Professional identity						
Doctor of medicine	8,434	5,547	2,629	212	39	8
Doctor of osteopathy	181	124	51	-	1	5
Board certification						
Certified	4,953	2,989	1,788	148	23	5
Not certified	3,662	2,682	892	64	17	8
Principal type of employment						
Self-employed						
Solo practice	5,902	4,076	1,696	104	14	11
Partnership	1,407	850	535	21	1	-
Group practice	487	290	189	6	2	-
Nongroup arrangement with other physicians	361	230	124	7	-	-
Salaried						
Medical school	222	78	84	54	5	-
Nongovernment hospital	55	30	15	7	3	-
City or county government hospital	21	15	2	3	-	-
City or county government	17	14	-	-	2	-
State government hospital	28	17	5	2	2	1
State government	12	10	1	-	1	-
Federal Government hospital	67	36	22	7	3	-
Federal Government	18	11	2	1	2	1
Other[2]	19	13	3	-	2	-
Volume of activity						
Less than 48 weeks per year:						
1-34 hours per week	450	398	40	9	1	1
35 hours or more per week	1,736	1,111	567	47	4	6
48-52 weeks per year:						
1-34 hours per week	603	544	50	7	1	1
35-48 hours per week	2,485	1,818	615	30	18	4
49 hours or more per week	3,341	1,800	1,406	119	16	1

See footnotes at end of table.

Table 18. Number and percent distribution of active ophthalmologists by percent of time spent per week in administration, according to selected characteristics: United States, 1968—Con.

Selected characteristic	Total	Time spent per week in administration[1]				
		No time	1-19 percent	20-49 percent	50-99 percent	100 percent
	Percent distribution					
United States	100.0	65.8	31.1	2.5	0.5	0.2
Age						
Under 35 years	100.0	61.4	35.3	3.0	0.3	-
35-39 years	100.0	53.8	43.2	2.8	0.3	-
40-44 years	100.0	55.5	41.3	2.9	0.3	-
45-49 years	100.0	60.4	36.2	2.2	0.7	0.5
50-54 years	100.0	59.5	36.4	3.2	0.5	0.4
55-59 years	100.0	65.0	31.6	2.9	0.3	0.2
60-64 years	100.0	77.1	20.1	1.5	1.1	0.2
65-69 years	100.0	83.0	14.3	2.2	0.5	-
70 years and over	100.0	91.3	7.6	0.9	0.2	-
Sex						
Male	100.0	65.5	31.4	2.5	0.5	0.2
Female	100.0	76.3	20.9	2.4	0.5	-
Professional identity						
Doctor of medicine	100.0	65.8	31.2	2.5	0.5	0.1
Doctor of osteopathy	100.0	68.5	27.9	-	0.6	3.0
Board certification						
Certified	100.0	60.3	36.1	3.0	0.5	0.1
Not certified	100.0	73.2	24.4	1.7	0.5	0.2
Principal type of employment						
Self-employed						
Solo practice	100.0	69.1	28.7	1.8	0.2	0.2
Partnership	100.0	60.4	38.0	1.5	0.1	-
Group practice	100.0	59.6	38.8	1.1	0.5	-
Nongroup arrangement with other physicians	100.0	63.7	34.4	1.9	-	-
Salaried						
Medical school	100.0	35.1	38.1	24.4	2.5	-
Nongovernment hospital	100.0	55.1	26.4	12.5	6.0	-
City or county government hospital	100.0	73.3	10.8	15.9	-	-
City or county government	100.0	86.6	-	-	13.4	-
State government hospital	100.0	60.0	19.7	8.1	8.1	4.2
State government	100.0	81.6	9.2	-	9.1	-
Federal Government hospital	100.0	53.1	31.9	10.1	4.9	-
Federal Government	100.0	62.8	12.4	6.2	12.6	6.0
Other[2]	100.0	70.6	17.6	-	11.9	-
Volume of activity						
Less than 48 weeks per year:						
1-34 hours per week	100.0	88.5	9.0	2.0	0.2	0.2
35 hours or more per week	100.0	64.0	32.7	2.7	0.2	0.3
48-52 weeks per year:						
1-34 hours per week	100.0	90.2	8.3	1.1	0.2	0.2
35-48 hours per week	100.0	73.2	24.7	1.2	0.7	0.2
49 hours or more per week	100.0	53.9	42.1	3.6	0.5	0.0

[1] Includes professional associations, hospital medical staffs, etc. Administrative duties related to the medical care of the respondent's own patients are excluded here and included under specific clinical activity engaged in.

[2] Includes all types of insurance carriers, pharmaceutical companies, corporations, voluntary associations, medical societies, associations, etc.

APPENDIX I

TECHNICAL NOTES AND QUALIFYING COMMENTS

Data Collection

Most of the statistical information used in this report is the product of a survey of ophthalmologists conducted by the National Center for Health Statistics between May and December 1968. This was a part of a general survey of eye-care manpower which sought information on four groups—ophthalmologists (both doctors of medicine and doctors of osteopathy), optometrists, opticianry establishments, and dispensing opticians.

In advance of the actual survey of the ophthalmologists, prominent ophthalmological associations received copies of the proposed questionnaires and survey plan. A number of government agencies—Federal, State, and local—were also contacted. Recommendations received from these advisory sources were used to modify the survey plan and questionnaires.

An announcement of the survey was published by the *Eye, Ear, Nose and Throat Monthly, The Ophthalmologist,* and the newsletter of the American Osteopathic Association. The American Association of Ophthalmology cooperated by sending a letter to each of its members urging their participation.

A total of 10,302 ophthalmologists comprised the survey universe, a figure which included both doctors of medicine (M.D.'s) and doctors of osteopathy (D.O.'s). M.D. ophthalmologists surveyed included all those who had reported to the American Medical Association that ophthalmology was their primary or secondary specialty. Of the 10,102 M.D. ophthalmologists surveyed, 9,020, or 89.2 percent, listed ophthalmology as their primary specialty, while 1,082, or 10.7 percent, designated it as their secondary specialty.

D.O. ophthalmologists included in the survey universe were all those doctors of osteopathy who had reported to the American Osteopathic Association that they devoted any time whatever to ophthalmology. Of the 200 D.O. ophthalmologists surveyed, 17, or 8.5 percent, had reported that they devoted 75 percent or more of their work week to ophthalmology. An additional 21, or 10.5 percent, reported between 50 and 75 percent, while the remaining 145, or 72.5 percent, apparently devoted under 25 percent of their work week to ophthalmological activities.

A pretest was conducted by the National Center for Health Statistics during the 1-month period from May 31 to July 3, 1968. Questionnaires were mailed to two M.D. ophthalmologists in each State and the District of Columbia. Twenty-five D.O. ophthalmologists were selected at random and mailed questionnaires. A 90.5-percent response to the pretest was achieved, and based on an analysis of this pretest response, certain minor alterations were made in the M.D. questionnaire and the D.O. questionnaire.

The revised questionnaires appear in appendix III as they were used in final form.

In the remaining months of 1968 the main body of the ophthalmologist universe was surveyed. The collection of data for the survey was accomplished under contract with the U.S. Bureau of the Census. This agency was responsible for the mailing of the questionnaires, receipt, and control of the responses, and followup whenever incomplete or inadequate questionnaires were returned or whenever a questionnaire was not returned. Four mailings were used in an attempt to elicit a response, the first three by first-class mail, the last by certified mail. All four mailings were made in every case where a return was not received.

In addition to the mailings, telephone contacts and personal interviews were also used. They were employed in cases of nonresponse or refusal as well as in cases of questionnaires which had been only partially completed.

After all contact efforts a response rate of 92.7 percent was achieved.

In addition to the information obtained directly from the survey respondents, this report also uses supplementary information supplied by the American Medical Association and the American Osteopathic Association for such characteristics as sex, chronological age, age at graduation, and certification by specialty boards.

Processing of Data

A preliminary edit was undertaken at the time of the return of the survey questionnaires. This was done to insure completeness of the responses. The information from the questionnaires was then coded, punched, and placed on computer tape.

During the cleanup and editing phases of the processing an elaborate series of checks and cross-checks were made, chiefly to confirm accuracy of response and to correct coding and punching errors that occurred, but also to insure consistency between related items.

Table I shows the overall response to the survey. Of the total 10,302 M.D. and D.O. ophthalmologists included in the original survey universe, 1,245, or 12.1 percent, were eliminated in processing as out of scope for the purpose of reporting. These out-of-scopes included 133 respondents who were either practicing ophthalmology in foreign countries or not engaged at all in the practice of ophthalmology; 233 uniformed ophthalmologists (in the Army, Navy, Air Force, and Public Health Service); and 879 students in ophthalmology residency programs (both civilian and military). Data reported, then, are for civilian ophthalmologists who have completed their training requirements and are formally qualified to practice. In number this group amounted to 9,057 ophthalmologists, or 87.9 percent of the original universe.

A total of 8,136, or 90.0 percent of the 9,057, responded to the survey with usable questionnaires. The remainder was composed of 675 nonrespondents (i.e., no questionnaires returned, reason unspecified); 186 post office returns; and 60 deceased nonrespondents; or 7.5 percent, 1.8 percent, and 0.6 percent, respectively.

Of the 8,136 usable questionnaires (good responses), 7,741, or 95.1 percent, specified an active status while 395 reported that they were either retired or not currently engaged in ophthalmological activities although not retired.

Table I. Number and percent distribution of survey population by type of respondent or nonrespondent: United States, 1968

Type of respondent or nonrespondent	Number	Percent of total
Total questionnaires mailed--	10,302	100.0
Out-of-scopes:		
Not practicing in United States or not engaged at all in ophthalmology----------	133	1.3
Uniformed ophthalmologists---	233	2.3
In ophthalmology residency programs----------	879	8.5
Civilian, formally qualified ophthalmologists----------	9,057	87.9
Civilian, formally qualified ophthalmologists----------	9,057	100.0
Unusable questionnaires:		
Nonrespondents (reason unspecified)----------	675	7.5
Post office returns----------	186	1.8
Deceased nonrespondents------	60	0.6
Good responses----------	8,136	90.0
Good responses----------	8,136	100.0
Active ophthalmologists------	7,741	95.1
Inactive ophthalmologists----	395	4.9

Adjustments

Two types of adjustment were applied to the survey responses.

The first was an adjustment for partial nonresponse within the questionnaire; for example, leaving one item unanswered. In such cases omitted items were randomly assigned the response obtained from respondents with similar characteristics and the total figure for the item adjusted to include this "imputation." As may be seen in table II, the need for this type of adjustment was minimal; the item nonresponse rate was less than 4 percent for all items considered in this general report except for the question on approximate number of patients seen per week, where the nonresponse rate was 7.8 percent. At least two factors may have contributed to the high nonresponse rate for this item. First, the question occurs relatively late in the questionnaire and a certain amount of respondent fatigue may have set in. The second factor, however, seems to carry more weight. It concerns question content. Respondents were asked to derive the approximate number of eye patients seen in a typical week from the approximate number of patient visits during a typical week. This involved a judgment as to typicality as well as the need to make a quantified estimate which is itself a second-order derivation from another quantified estimate. This rather difficult succession of requirements may have acted to inhibit freer response to the item.

In addition to this adjustment for item nonresponse, an adjustment was also made for unit nonresponse, i.e., for nonavailability of the entire questionnaire. This "inflation" factor was established from the ratio of total ophthalmologists in a civilian formally qualified status to the number of usable (good) responses obtained. The average inflation factor was, therefore, 9,057:8,136, or 1 + .1132. Applied to the 7,741 active good respondents cited above, it produced a weighted national estimate of 8,616 ophthalmologists who were active, not uniformed, and formally qualified in the United States in 1968. This figure of 8,616 supplies the statistical base for most of the tables and textual commentary in this report. Table III shows the distribution of these ophthalmologists by State before and

Table II. Percentages of active ophthalmologists responding to selected questions on survey questionnaires: United States, 1968

Questionnaire item[1]	Preadjustment percentage of active ophthalmologist's responding
Activity status	100.0
States where licensed	97.4
Principal type of employment	98.1
Weeks per year usually worked	96.6
Hours per week usually worked	96.4
Clinical and nonclinical activities	97.1
Ophthalmological subspecialy	96.9
Use of supplementary personnel	97.1
Patient services rendered	97.2
Eye patients seen weekly	92.2

[1] Data presented in this table are not for all items on the questionnaires, only for items that fall within the scope of this particular report.

after the application of the appropriate inflation factor for each State.

Qualifying Comments

The survey questionnaires did not define the terms "full-time" and "part-time," leaving their interpretation to the subjective judgment of the respondents, 89.2 percent of whom reported full-time activity. The proportion of time that D.O. ophthalmologists devoted to ophthalmological activities is discussed on page 49 of this appendix. The number of osteopaths engaged full time in the practice of ophthalmology was few. M.D. ophthalmologists comprised 97.9 percent of the survey respondents, and about 89 percent of these M.D. respondents had already reported to the AMA that ophthalmology was their "primary" specialty. It seems likely that the conditions "full-time" and "primary" tended to be applied interchangeably by M.D. respondents.

In order to obtain from these survey findings a ratio of active ophthalmologists to general population which would be comparable to the ratios established in the study by Ivan J. Fahs entitled "Vision Manpower in the United States,"[3] it was necessary to abstract from the survey population to include only M.D. respondents reporting a primary specialty in ophthalmology. This meant deducting from the total active universe of 8,616 ophthalmologists a figure of 1,084 practitioners (181 osteopathic ophthalmologists and approximately 903 M.D. ophthalmologists who had reported ophthalmology as a "secondary" specialty). This reduction led to a figure of 7,532 which, when applied to the estimated general population of 1,975,600, produced the ratio of 3.8 per 100,000 used in this report as directly comparable to the ratio of the Fahs study.

Data on specialty board status of M.D. ophthalmologists was obtained from AMA. Tabular data and narrative are presented on "first" and "second" diplomates of the American Board of Ophthalmology and the American Board of Otolaryngology. Using preadjustment figures, of the 10,102 M.D. ophthalmologists included in the original survey universe, 5,002, or 49.5 percent, designated the American Board of Ophthalmology as their first specialty board while 609, or 6.0 percent, designated the American Board of Otolaryngology to be their first specialty board. Sixteen, or 0.1 percent, designated ophthalmology as their second board specialty, while 233, or 2.3 percent designated otolaryngology as a second board specialty.

By "clinical activity" is meant activity in direct diagnosis and treatment of patients. "Teaching" was intended to comprehend not only formal instruction as a faculty member in a medical school, but all forms of teaching, training or instruction—formal or informal, indifferent of locus—that an ophthalmologist might engage in, along with the preparation time involved. "Administration" was perhaps the least clearly defined of the activities. The survey respondent was asked to report as administrative activity his duties with "e.g., professional associations, hospital medical staff, etc." The survey instructions specified that administrative duties related to the medical care of the ophthalmologist's own patients should be excluded from this nonclinical adminstrative category and included as time spent in a specific clinical activity. It seems likely that much activity which is essentially administrative in character may be concealed in the data for the clinical activities or be otherwise unreported.

NOTE: The list of references follows the text.

Table III. Distribution of active, civilian, formally qualified ophthalmologists by State before and after application of adjustment ratios: United States, 1968

State	Responding active ophthalmologists	Adjustment factor	Weighted estimate of ophthalmologists
United States-----	7,741	1.11	8,616
Alabama-----	78	1.11	87
Alaska-----	5	1.00	5
Arizona-----	75	1.06	80
Arkansas-----	38	1.07	41
California-----	972	1.11	1,079
Colorado-----	117	1.05	123
Connecticut-----	133	1.14	152
Delaware-----	18	1.15	21
District of Columbia----	65	1.25	81
Florida-----	267	1.13	302
Georgia-----	128	1.11	142
Hawaii-----	27	1.11	30
Idaho-----	31	1.09	34
Illinois-----	373	1.15	429
Indiana-----	152	1.15	175
Iowa-----	86	1.19	102
Kansas-----	70	1.08	76
Kentucky-----	91	1.06	96
Louisiana-----	131	1.17	153
Maine-----	37	1.05	39
Maryland-----	136	1.21	165
Massachusetts-----	246	1.14	280
Michigan-----	303	1.12	339
Minnesota-----	137	1.08	148
Mississippi-----	58	1.07	62
Missouri-----	179	1.06	190
Montana-----	37	1.05	39
Nebraska-----	46	1.20	55
Nevada-----	15	1.07	16
New Hampshire-----	26	1.03	27
New Jersey-----	277	1.11	307
New Mexico-----	40	1.13	45
New York-----	908	1.12	1,017
North Carolina-----	158	1.10	174
North Dakota-----	19	1.05	20
Ohio-----	360	1.09	392
Oklahoma-----	88	1.10	97
Oregon-----	101	1.08	109
Pennsylvania-----	527	1.11	585
Rhode Island-----	30	1.06	32
South Carolina-----	64	1.13	72
South Dakota-----	21	1.05	22
Tennessee-----	119	1.10	131
Texas-----	362	1.12	405
Utah-----	45	1.04	47
Vermont-----	19	1.00	19
Virginia-----	144	1.15	166
Washington-----	147	1.09	160
West Virginia-----	58	1.11	64
Wisconsin-----	162	1.04	168
Wyoming-----	15	1.07	16

APPENDIX II

DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

Age.—Refers to the respondent's age in 1968. In all cases, age is calculated as the difference between 1968 and respondent's year of birth.

Clinical ophthalmology.—Signifies professional activity characterized by direct diagnosis and treatment of eye patients.

Geographic area.—The United States (the 50 States and the District of Columbia) is divided into regions and divisions as follows:

Region and Division	*States Included*
Northeast	
New England	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut
Middle Atlantic	New York, New Jersey, Pennsylvania
North Central	
East North Central	Ohio, Indiana, Illinois, Michigan, Wisconsin
West North Central	Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas
South	
South Atlantic	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida
East South Central	Kentucky, Tennessee, Alabama, Mississippi
West South Central	Arkansas, Louisiana, Oklahoma, Texas
West	
Mountain	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada
Pacific	Washington, Oregon, California, Alaska, Hawaii

Group practice.—The delivery of medical services by three or more physicians formally organized to provide medical care, consultation, diagnosis, and/or treatment through the joint use of equipment and personnel and with the income from medical practice distributed in accordance with methods previously determined by members of the group.

Salaried employment:

Hospital employment.—Salaried employment by nongovernmental hospitals and by city, county, State, and Federal hospitals.

Nonhospital employment.—Salaried employment by medical school (or parent university); city, county, State, and Federal governments (other than hospitals); and by other employers (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, etc.).

APPENDIX III

SURVEY QUESTIONNAIRES

Questionnaire for Doctors of Medicine

PHS-T407-1
REV. 9-68

Form Approved
Budget Bureau No. 68-S68028

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR THE
U.S. PUBLIC HEALTH SERVICE

CONFIDENTIAL: All information which permits the identification of the individual will be held strictly confidential, will be used solely by persons engaged in, and only for the purposes of the survey and will not be disclosed or released to other persons or for any other purpose.

SURVEY OF OPHTHALMOLOGISTS

1. Is your name correct, and is the address above your PRIMARY PLACE OF PRACTICE?

1 ☐ Yes 2 ☐ No

If no, please enter the correct information below:

Name: _____
First *Middle* *Last*

Primary place of practice: _____
Number *Street*

_____
City *State* *Zip Code*

2. Where were you born? _____
(State or foreign country)

3. In which States do you currently hold an ACTIVE LICENSE to practice medicine?

_____

_____

4. Are you CURRENTLY ACTIVE in medicine? *(Include patient care, teaching, research, and administration.)*

1 ☐ Yes, Full-time
2 ☐ Yes, Part-time

→ PROCEED TO QUESTION 5.

3 ☐ No, Not active in medicine
4 ☐ No, Retired

→ STOP! REMAINDER OF QUESTIONNAIRE DOES NOT APPLY. PLEASE RETURN QUESTIONNAIRE IN THE ENVELOPE PROVIDED.

5. Which of the following categories best describes your PRINCIPAL form of practice or employment? (Check one)

01 ☐ Solo practice
02 ☐ Partnership practice
03 ☐ Group practice
04 ☐ Arrangement with other physician(s): non-group
05 ☐ Medical school *(or parent university)*
06 ☐ Non-governmental hospital
07 ☐ City or county government hospital
08 ☐ City or county government other than hospital
09 ☐ State government hospital
10 ☐ State government other than hospital
11 ☐ Federal government hospital *(Specify agency: _____)*
12 ☐ Federal government other than hospital *(Specify agency: _____)*
13 ☐ Other – Not listed above *(all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, etc.).*

If you have checked 02, 03, or 04, what is the name of your GROUP, PARTNERSHIP or NON-GROUP ARRANGEMENT?
Name of group: _____

6. In your PRINCIPAL form of practice or employment indicated in Item 5, are you PRIMARILY: *(Check one)*

1 ☐ Self-employed
2 ☐ Salaried employee *(other than in training or in military service)*
3 ☐ In the military service *(other than intern or resident)*
4 ☐ Intern - Civilian
5 ☐ Intern - Military
6 ☐ Resident or fellow - Civilian
7 ☐ Resident or fellow - Military

7. How many WEEKS per year do you usually practice medicine? *(Include patient care, teaching, research, and administration. Do not count vacations as weeks worked).*

_____
(Weeks per year)

8. How many HOURS per week do you usually practice medicine? *(Include patient care, teaching, research, and administration.)*

_____
(Hours per week)

9. APPROXIMATELY what PERCENT of the total number of hours per week, indicated in Item 8, do you usually spend in each of the following activities?

a. _____ % Clinical ophthalmology
b. _____ % Clinical otorhinolaryngology
c. _____ % Other clinical medical activity
d. _____ % Teaching (Include hours spent in preparation)
e. _____ % Medical research
f. _____ % Administration, e.g., professional associations, hospital medical staffs, etc. *(Administrative duties related to the medical care of your OWN patients should be excluded in f and included in a, b, or c.)*
g. _____ % Other *(Specify: _____)*
100 % TOTAL

If 0% of your time is spent in CLINICAL OPHTHALMOLOGY (Item 9a above), STOP, and return questionnaire in the envelope provided; otherwise continue.

10. **A. In your CLINICAL OPHTHALMOLOGY practice, APPROXIMATELY how many EYE patient VISITS do you have during a typical week?** *(Include office and hospital outpatient visits)*

_____
(Approximate number of visits)

B. APPROXIMATELY how many EYE PATIENTS does this represent? *(Patients with multiple visits should be counted only once.)*

_____
(Approximate number of patients)

11. **In your CLINICAL OPHTHALMOLOGY practice, which of the services below are rendered to your patients by you or under your direction?**

(Check all that apply)

01 ☐ Diagnostic examination *(includes refractive procedures and tonometry)*
02 ☐ Medical treatment
03 ☐ Eye surgery
04 ☐ Visual field examination and medical interpretation
05 ☐ Fitting contact lenses
06 ☐ Orthoptic training *(any procedure to improve acuity or binocularity)*
07 ☐ Prescribing low vision aids *(includes optical aids greater than +4.00 addition)*
08 ☐ Aniseikonic testing
09 ☐ Tonography
10 ☐ Other *(Specify:* _____
_____ *)*

12. **In your CLINICAL OPHTHALMOLOGY practice, which of the following categories best describes how you spend the GREATEST amount of your time?**

(Check one)

1 ☐ General ophthalmology, medical and surgical
2 ☐ Corneal surgery
3 ☐ Retinal surgery
4 ☐ Pediatric ophthalmology
5 ☐ Ophthalmic pathology
6 ☐ Neuro-ophthalmology
7 ☐ Other *(Specify:* _____ *)*

13. **What is the total number of office locations at which you currently practice CLINICAL OPHTHALMOLOGY?**

_____
(Number of locations)

14. In your **PRINCIPAL FORM OF PRACTICE OR EMPLOYMENT**, indicated in Item 5 above, do you have supplementary personnel to assist you?

1 [ ] Yes 2 [ ] No

Please indicate the NUMBER in each category below for ALL offices combined which are related to your principal form of practice or employment. Include hospital personnel ONLY if your principal form of practice or employment is hospital-based.

(Persons who spend less than 75% of their time in any one category below should be counted in category d, ophthalmic medical assistant-general.)

	NUMBER WHO WORK FULL-TIME (35 hours or more per week)		NUMBER WHO WORK PART-TIME (Less than 35 hours per week)	
	FOR YOU ALONE	FOR YOU AND ASSOCIATES	FOR YOU ALONE	FOR YOU AND ASSOCIATES
a. Secretaries, receptionists, and other administrative personnel				
b. Registered nurses				
c. Licensed practical nurses (or L.V.N.'s)				
d. Ophthalmic medical assistants-general				
e. Ophthalmic medical assistants-refractive				
f. Optical fitters (including opticians)				
g. Contact lens technicians				
h. Optical technicians (laboratory – ophthalmic or contact lenses)				
i. Orthoptists				
j. Other clinical assistants				
k. Optometrists (performing refractions and prescribing lenses on OWN authority)				

15A. If you have made entries under **FOR YOU AND ASSOCIATES** in the full-time or part-time columns in Item 14 above, how many associates, **COUNTING YOURSELF**, share these personnel?

_____
(Number of associates)

B. Of these associates, how many are **PHYSICIANS, COUNTING YOURSELF?**

_____
(Number of physicians)

C. Of these physicians, how many are **OPHTHALMOLOGISTS, COUNTING YOURSELF?**

_____
(Number of ophthalmologists)

COMMENTS – General comments are invited as well as comments on specific items:

PLEASE RETURN QUESTIONNAIRE IN THE STAMPED ENVELOPE PROVIDED.

Questionnaire for Doctors of Osteopathy

PHS-T407-2
REV. 5-68

Form Approved
Budget Bureau No. 68-S68028

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR THE
U.S. PUBLIC HEALTH SERVICE

CONFIDENTIAL: All information which permits the identification of the individual will be held strictly confidential, will be used solely by persons engaged in, and only for the purposes of the survey and will not be disclosed or released to other persons or for any other purpose.

SURVEY OF OPHTHALMOLOGISTS

1. Is your name correct, and is the address above your **PRIMARY PLACE OF PRACTICE?**

   1 ☐ Yes 2 ☐ No

   If no, please enter the correct information below:

   Name: _____ (First / Middle / Last)

   Primary place of practice: _____ (Number / Street)

   _____ (City / State / Zip Code)

2. Where were you born? _____ (State or foreign country)

3. Are you a citizen of the United States? *(Please check appropriate box)*

   1 ☐ Yes, Native Born 2 ☐ Yes, Naturalized 3 ☐ No

4. What degrees have you earned **OTHER THAN** Doctor of Osteopathy or Doctor of Medicine? *(Check all that apply)*

   1 ☐ Doctorate (*Specify Major Field*: _____)
   2 ☐ Master's (*Specify Major Field*: _____)
   3 ☐ Bachelor's (*Specify Major Field*: _____)
   4 ☐ Other (*Specify*: _____)
   5 ☐ None

5. In which States do you currently hold an **ACTIVE LICENSE** to practice osteopathic medicine?

   _____

6. Are you **CURRENTLY ACTIVE** in osteopathic medicine? *(Include patient care, teaching, research and administration).*

   1 ☐ Yes, Full-time
   2 ☐ Yes, Part-time
   → PROCEED To Question 7.

   3 ☐ No, Not active in osteopathic medicine
   4 ☐ No, Retired
   → **STOP!** Remainder of questionnaire does not apply. Please return questionnaire in the envelope provided.

7. **Which of the following categories best describes your PRINCIPAL form of practice or employment?**
(Check one)

01 ☐ Solo practice
02 ☐ Partnership practice
03 ☐ Group practice
04 ☐ Arrangement with other physician(s): non-group
05 ☐ Osteopathic medical school *(or parent university)*
06 ☐ Non-governmental hospital
07 ☐ City or county government hospital
08 ☐ City or county government other than hospital
09 ☐ State government hospital
10 ☐ State government other than hospital
11 ☐ Federal government hospital *(Specify agency:* _____ *)*
12 ☐ Federal government other than hospital *(Specify agency:* _____ *)*
13 ☐ Other–Not listed above *(all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, etc.).*

If you have checked 02, 03, or 04, what is the name of your GROUP, PARTNERSHIP or NON-GROUP ARRANGEMENT?

Name of group: _____

8. **In your PRINCIPAL form of practice or employment indicated in Item 7, are you PRIMARILY:**
(Check one)

1 ☐ Self-employed
2 ☐ Salaried employee *(Other than in training or in military service)*
3 ☐ In the military service *(Other than intern or resident)*
4 ☐ Intern - Civilian
5 ☐ Intern - Military
6 ☐ Resident or fellow - Civilian
7 ☐ Resident or fellow - Military

9. **How many WEEKS per year do you usually practice osteopathic medicine?** *(Include patient care, teaching, research, or administration. Do not count vacations as weeks worked.)*

_____
(Weeks per year)

10. **How many HOURS per week do you usually practice osteopathic medicine?** *(Include patient care, teaching, research, or administration.)*

_____
(Hours per week)

11. **APPROXIMATELY what PERCENT of the total number of hours per week, indicated in Item 10, do you usually spend in each of the following activities?**

a. _____ % Clinical ophthalmology
b. _____ % Clinical otorhinolaryngology
c. _____ % Other clinical osteopathic medical activity
d. _____ % Teaching *(Include hours spent in preparation.)*
e. _____ % Osteopathic medical research
f. _____ % Administration, e.g., professional associations, hospital medical staffs, etc. *(Administrative duties related to the medical care of your OWN patients should be excluded in f and included in a, b, or c.)*
g. _____ % Other *(Specify* _____ *)*
100 % TOTAL

If 0% of your time is spent in CLINICAL OPHTHALMOLOGY *(Item 11a. above)* **STOP, and return questionnaire in the envelope provided; otherwise continue.**

12. **A. In your CLINICAL OPHTHALMOLOGY practice, APPROXIMATELY how many EYE patient VISITS do you have during a typical week?** *(Include office and hospital outpatient visits)*

_____
(Approximate number of visits)

B. APPROXIMATELY how many EYE PATIENTS does this represent? *(Patients with multiple visits should be counted only once.)*

_____
(Approximate number of patients)

13. **In your CLINICAL OPHTHALMOLOGY practice, which of the services below are rendered to your patients by you or under your direction?**

(Check all that apply)

01 ☐ Diagnostic examination *(Includes refractive procedures and tonometry)*
02 ☐ Medical treatment
03 ☐ Eye surgery
04 ☐ Visual field examination and medical interpretation
05 ☐ Fitting contact lenses
06 ☐ Orthoptic training *(Any procedure to improve acuity or binocularity)*
07 ☐ Prescribing low vision aids *(Includes optical aids greater than +4.00 addition)*
08 ☐ Aniseikonic testing
09 ☐ Tonography
10 ☐ Other *(Specify* _____ *)*

14. **In your CLINICAL OPHTHALMOLOGY practice, which of the following categories best describes how you spend the GREATEST amount of your time?**

(Check one)

1 ☐ General ophthalmology, medical and surgical
2 ☐ Corneal surgery
3 ☐ Retinal surgery
4 ☐ Pediatric ophthalmology
5 ☐ Ophthalmic pathology
6 ☐ Neuro-ophthalmology
7 ☐ Other *(Specify:* _____ *)*

15. **What is the total number of office locations at which you currently practice CLINICAL OPHTHALMOLOGY?**

_____
(Number of locations)

16. In your PRINCIPAL FORM OF PRACTICE OR EMPLOYMENT, indicated in Item 7 above, do you have supplementary personnel to assist you?

1 ☐ Yes 2 ☐ No

Please indicate the NUMBER in each category below for ALL offices combined which are related to your principal form of practice or employment. Include hospital personnel ONLY if your principal form of practice or employment is hospital-based.

(Persons who spend less than 75% of their time in any one category below should be counted in category d, ophthalmic medical assistant-general.)

	NUMBER WHO WORK FULL-TIME (35 hours or more per week)		NUMBER WHO WORK PART-TIME (Less than 35 hours per week)	
	FOR YOU ALONE	FOR YOU AND ASSOCIATES	FOR YOU ALONE	FOR YOU AND ASSOCIATES
a. Secretaries, receptionists, and other administrative personnel				
b. Registered nurses				
c. Licensed practical nurses (or L.V.N.'s)				
d. Ophthalmic medical assistants-general				
e. Ophthalmic medical assistants-refractive				
f. Optical fitters (including opticians)				
g. Contact lens technicians				
h. Optical technicians (laboratory – ophthalmic or contact lenses)				
i. Orthoptists				
j. Other clinical assistants				
k. Optometrists (performing refractions and prescribing lenses on OWN authority)				

17A. If you have made entries under FOR YOU AND ASSOCIATES in the full-time or part-time columns in Item 16 above, how many associates, COUNTING YOURSELF, share these personnel?

_____
(Number of associates)

B. Of these associates, how many are PHYSICIANS, COUNTING YOURSELF?

_____
(Number of physicians)

C. Of these physicians, how many are OPHTHALMOLOGISTS, COUNTING YOURSELF?

_____
(Number of ophthalmologists)

COMMENTS – General comments are invited as well as comments on specific items:

PLEASE RETURN QUESTIONNAIRE IN THE STAMPED ENVELOPE PROVIDED.